



King's Research Portal

Document Version
Peer reviewed version

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Betz, D. J., & Stanford-Tuck, H. (2019). The City is Neutral: On War in the 21st Century. *Texas National Security Review*, 2 (4), 61-82. <https://tnsr.org/2019/10/the-city-is-neutral-on-urban-warfare-in-the-21st-century/>

Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

Take down policy

If you believe that this document breaches copyright please contact librarypure@kcl.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.

The City Is Neutral: On Urban Warfare in the 21st Century

Abstract: Contrary to what is often supposed, urban warfare is not more difficult than other types of warfare. The combat environment is neutral, just like every other environment. Urban warfare is, however, likely to be more prevalent in coming years, which is why it is important that Western armies learn to do it confidently. The current approach to this type of fighting is wrong because it is burdened by bad history. The problems of urban combat are not new. Moreover, they are solvable through a combination of hard training, changes in command mindset, and technological innovation. We propose a “strongest gang” model as a realistic solution to the problems of urban conflict that cannot be addressed by the current dominant methods that are too positively controlled, too manpower-intensive, too cautious, and cede too much initiative to objectively weaker and less capable opponents.

The truth is that the jungle is neutral. It provides any amount of fresh water, and unlimited cover for friend as well as foe—an armed neutrality, if you like, but neutrality nevertheless. It is the attitude of mind that determines whether you go under or survive. ‘There is nothing either good or bad, but thinking makes it so.’ The jungle itself is neutral.¹
- F. Spencer Chapman

The urban environment is complex and difficult. Tactically, it strains communications, overloads sensory capability, and pushes the decision-making onus to the lowest level. Strategically, it is complex because tactical actions are amplified and the speed at which local and international audiences are informed has never been faster. American and British environmental doctrine emphasizes the significant operational challenges that this environment presents.² In truth, however, the urban setting is neutral. It affects all protagonists equally, even if it does not always appear to do so. In *The Jungle is Neutral*, the classic account of three years of behind-the-lines jungle fighting against the Japanese in Malaya during World War II, the British soldier F. Spencer Chapman attributed his success to the principle that the environment is intrinsically neither good nor bad but neutral. What is true for warfare in the jungle — an environment that inflicts its own demands every bit as severe as those of the city — ought to be true for urban warfare.

And yet, although conflict in cities is more prevalent now than in the past on account of demographic trends and urbanization, the supposedly challenging nature of urban warfare — as opposed to warfare in other “simpler” environments — is contradicted by many historical and contemporary examples. There are obvious difficulties that fighting a war in an urban environment poses, but they are surmountable through a combination of realistic hard training, changes in command mindset — at the strategic and political level as much as at the tactical level — and technological innovation (in order of priority). In some ways, the urban

¹ F. Spencer Chapman, *The Jungle Is Neutral* (London: Chatto and Windus, 1950), 125.

² See the list of urban warfare characteristics in, *Joint Urban Operations*, Joint Publication 3-06 (Washington, DC: Joint Chiefs of Staff, Nov. 20, 2013), I-5–I-9.

environment is a rewarding one in which to fight because those best prepared to leverage the neutral environmental factors can use them to magnify their comparative strengths. There is no reason why professional, regular armed forces, such as predominate in the West, ought not to be the best prepared to fight in this domain.

The factors that threaten an army's equanimity when it comes to fighting in an urban environment are the same for all belligerents. They do not impact regular Western soldiers more than irregular, non-Western challengers, who are thought to be unaffected by, or even gain an advantage from, these factors. This thinking comes from an entrenched mindset that insists on the uniqueness of the urban environment and holds firmly to certain shibboleths about urban warfare that are equivocal, if not outright ahistoric. The better trained and better equipped soldier should be comfortable in the chaos of the city — or at any rate as comfortable as he or she would be in any other environment. This is true not only for confrontations between regular and irregular forces, but also for “near-peer” conflict. The advantages afforded to the better trained, equipped, supported, and mentally prepared soldier are magnified by this environment, which rewards tactical skill.

The line that “the future of war is not the son of Desert Storm, but the stepchild of Chechnya and Somalia” is a staple of the literature on contemporary strategic affairs.³ It was written by former United States Marine Corps Commandant Gen. Charles Krulak as part of a speech at the Royal United Services Institute in London in 1996 in which he also coined the oft-quoted term “strategic corporal.” His overall argument was as follows: On account of the increasing interconnectedness of the world, the West will inevitably be drawn into “someone else's wars” — which is to say, wars of choice that feature limited political commitment on the part of intervening forces.⁴ Those wars will increasingly be centered in large, poorly governed urban areas, and will be fought against well-armed and capable opponents who will most likely be nonstate or quasi-nonstate actors. All of this will take place under the unblinking stare of the camera, bringing the local to the global stage and the global to the local stage.

Together, these factors create a monster — like the mythical hundred-eyed Greek giant Argus Panoptes — that looms in the consciousness of generals and statesmen.⁵ Seemingly grave tactical challenges are mixed with strategic unpredictability in a context of strict limitations on the use of force and acceptance of casualties. British doctrine describes the near future of war alliteratively as congested, cluttered, connected, contested, and constrained.⁶ Likewise, the notable strategic thinker David Kilcullen goes for three related Cs: crowded, complex, and coastal.⁷

There has developed a sort of orthodoxy, going back at least 20 years, which holds that population growth, urbanization, and interconnectedness — the driving forces of change in the global political economy — are pushing war into modes and contexts that conventional armed forces are finding, and will continue to find, vexingly difficult — in particular, the city. Whether

³ Charles C. Krulak, “The United States Marine Corps in 21st Century,” *RUSI Journal* 141, no. 4 (1996): 25, <https://doi.org/10.1080/03071849608446045>.

⁴ Krulak writes in his article that “we” will be drawn into such wars, referring to the United States Marine Corps. It is apparent from context, though, speaking to a British audience for publication in a Western professional military journal, that his message was aimed at the United States and its allies.

⁵ We thank independent scholar Lily Betz for this apposite allusion to mythology.

⁶ *Strategic Trends Programme: Future Operating Environment 2035*, U.K. Developments, Concepts, and Doctrine Centre, U.K. Ministry of Defence, 2015, 21, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/646821/20151203-FOE_35_final_v29_web.pdf.

⁷ David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (London: Hurst, 2013), chap. 5.

this orthodoxy is correct is debatable. The strength of its grasp on the military mind and the defense policy establishment, however, is not.

This paper is the joint effort of an academic and a professional soldier with 18 years of experience in infantry command, including multiple tours in Afghanistan and Iraq. It uses an ethnographic approach, a technique that has been increasingly applied to contemporary defense policy and strategic studies.⁸ It draws heavily on the subjective experience of practitioners with recent experience of urban warfighting, which we evaluate alongside a range of historical cases and extant doctrine from the United Kingdom, the United States, and NATO. In this respect, this paper also employs the techniques of applied history, which we understand in the sense described by the naval historian Geoffrey Till as the illumination of the present and future through resonant historical examples, not “to point out lessons [per se], but to isolate things that need thinking about.”⁹

We conducted fieldwork in the United Kingdom, France, Russia, the United States, Canada, and Israel between 2014 and 2017, which included lengthy visits to urban warfare training facilities, including observing and embedding in military exercises for periods of several days at a time. We also participated in numerous professional symposia on the subject, seminars, simulations, and wargames, mostly with the British Army (though nearly always with an international presence), as well as NATO. All told, we conducted over 40 interviews with veteran officers and noncommissioned officers, urban warfare trainers and course designers, doctrine authors, and subject-area specialists.

This paper proceeds in five sections. In the first section, we seek to establish the fundamental characteristics of urban warfare, making reference to canonical works on the history of the city; specifically, works on war and the city. This includes, first and foremost, how the city’s connections with other urban conglomerations and the density of the civilian population causes a distinctive compression of the levels of war such that the tactical and political become inextricably entangled. In the second section, we use two historical examples — the Roman sacking of Jerusalem in 70 AD and the British invasion of the River Plate during the Napoleonic Wars — to demonstrate that the problems of urban warfare are not new, as is often supposed or intimated. These examples serve as an important reminder to practitioners of the centuries of military and strategic wisdom accrued by their predecessors who faced similar dilemmas — and sometimes even solved them.

In choosing the examples noted above, we focused only on cases that took place prior to World War I and are well-documented. We excluded numerous cases of besieged cities in which capitulation occurred after the exterior defenses were breached, or where a defending commander surrendered when a breach looked inevitable — a typical occurrence in early-modern European fortress warfare.¹⁰ We also excluded cases where, although significant fighting continued on the streets after the outer defenses had failed, the historical accounts of said fighting were patchy and therefore there was little for us to say about it.¹¹ Our two examples were chosen because they superbly illustrate the rapid political, economic, and diplomatic impacts of urban warfare. Moreover, because they preceded the advent of the

⁸ For more on which, as well as a good example of such, see Amanda Chisholm, “Ethnography in Conflict Zones: The Perils of Researching Private Security Contractors,” in, *The Routledge Companion to Military Research Methods*, ed. Alison J. Williams et al. (Abingdon, Oxon: Routledge, 2016), chap. 11.

⁹ Geoffrey Till, *Maritime Strategy and the Nuclear Age* (London: Macmillan, 1982), 224.

¹⁰ Christopher Duffy, *Fire and Stone: The Science of Fortress Warfare, 1660-1860* (London: Greenhill Books, 1975), 188.

¹¹ The cases considered were: Jerusalem 70, Rome 410, Constantinople 1453, Londonderry 1689, Gibraltar 1779–83, Acre 1799, Sevastopol 1854, Lucknow 1857, Paris 1870–71, Plevna 1877, Mafeking 1899–1900, and Port Arthur 1904–05.

“information age,” which so preoccupies and confounds contemporary analysts, by about two millennia and two centuries, respectively, they serve as particularly apt correctives to the hype that often surrounds the topic of urban warfare today.

In the third section, we show how a narrow view of the history of urban warfare, particularly one that is resolutely focused on the experience of one titanic and highly peculiar battle — Stalingrad — distorts perceptions of the problem at hand and its potential solutions. Other World War II battles, and a range of post-1945 conflicts up to the present day, call into serious question the validity of the “lessons” of Stalingrad, such as the tendency for commanders to lose control of the battle, the symbolic resonance of cities that causes politicians to invest greater strategic meaning in them than they ought, the permanent advantages of the defender, the high force ratios necessary to succeed, and the idea that superior weaponry, training, and mobility inevitably become less important or useful in city fighting. The fourth section shifts focus from diagnosis to prescription. Here, we suggest a rather prosaic, albeit fundamental, reform: the substantial upgrading of training protocols, urban warfare facilities, and tactical training systems to allow armed forces to better familiarize themselves with urban warfare, and to practice and experiment in convincing settings that can accommodate large combined-arms teams. The bulk of this section is based on extended visits to a range of such facilities in several countries, as well as interviews with training staff to identify the central problems and best practices. There is no equivalent scholarly research on this subject in the civil sphere, and we suspect, based on our research, in military circles either.¹²

In the fifth section, we propose an approach to urban operations that we argue is in greater accordance with both the logic of projected force sizes, as compared with the current and imagined size of global megacities, and with our understanding of the best practices of military operations and leadership in all other environments — including simultaneity, tactical boldness, coordinated action of small units, and clarity of intent. The “strongest gang” model, as we call it, is a realistic solution to the problems of urban conflict that cannot be addressed by the current prevalent methods, which are too positively controlled, too manpower-intensive, too cautious, and cede too much initiative to objectively weaker and less capable opponents. In this section we shall also discuss several potential contributions of technology to the successful conduct of 21st century urban operations.

Overall, we accept that the reality of demographics and geopolitics means that warfare will increasingly occur in urban environments. Nevertheless, we argue this is not, in itself, a development to be feared. If this represents a change, then it is one of degree not of fundamentals and is manageable with the right mindset — one that is sensitive to both opportunities and threats — and with bold and creative leadership.

I. The Challenges of Urban Warfare: Political and Tactical Entanglement

War is a “continuation of political intercourse, carried on with other means,” wrote Clausewitz,¹³ while politics, since the days of Plato’s ideal *polis*, has been wound up tightly with the affairs of the city. To impose political will upon a group of people through the use of force would seem to require that it be exercised where the people actually live, generate wealth, and conduct collective public life. It is, therefore, important to recognize that the fundamental problem of urban warfare, the one that pervades it from the heights of strategy to the minutiae of house-clearing, is the inextricability of the tactical from the political.

¹² The United States Marine Corps Tactics and Operations Group based at Twentynine Palms, CA, has the longest established and most extensive experience in this subject area. The urban warfare group in the Modern War Institute at West Point is a more recent initiative but has done excellent work in the public domain.

¹³ Carl Von Clausewitz, *On War*, ed. Michael Howard and Peter Parker (New York: Alfred Knopf, 1993), 99.

Politics dictate what range of tactical options the practitioner can choose against which opponents in all contexts — this is a truism of war as applicable in cities as in rural areas, in cyberspace as well as outer space. For years now, there has been growing skepticism of the utility of the concept of “levels of war,” in which tactics nest hierarchically within operations, which nests within strategy, all of which are superseded by politics. This, essentially, is the essence of the aforementioned “strategic corporal” effect.

There is an urge, therefore, to separate these levels for analytical purposes. But this would be a mistake. The urban environment has a tendency to amplify the negative effects of viewing the relationship between politics and tactics as hierarchical, discrete, and unidirectional. According to this manner of thinking, it is possible to rationalize isolating tactics from the study of policy — and sometimes strategy — because the latter two purportedly matter much more. Although there is certainly good cause to believe that, in the long term, great tactics cannot compensate for bad policy, tactics are both the base for and servant of strategy and ought not be left aside.¹⁴

In cities, this is particularly true because the sheer density of people in a highly networked environment magnifies the degree to which politics and tactics are interwoven. Contemporary British doctrine, both in general as well as in regards to urban environments, illustrates this with its emphasis on the concept of “integrated action,” defined as the orchestration and execution of operations “in an interconnected world, where the consequences of military action are judged by an audience that extends from immediate participants to distant observers.”¹⁵

The Limits of Avoiding the City

For practically all of history, generals have loathed the prospect of fighting in cities and have sought to avoid it. Sun Tzu advised fighting in cities only if “absolutely necessary, as a last resort.”¹⁶ For 2,500 years, generals have happily agreed with the strategic wisdom of this maxim, whether or not they have read ancient Chinese military philosophy. Even today, while decision-makers acknowledge that they are going to have to fight in an urban environment at some point, when left to their own devices in wargames and experiments, NATO generals elect to bypass cities without hesitation.

Urban terrain poses a number of challenges for combat operations. Clausewitz described action in war as being like movement in a resistant medium. The elements that make up the atmosphere of war, he said, were danger, physical exertion, intelligence, and friction.¹⁷ Each of these is supposedly intensified in the city. The profusion of places to hide in this multidimensional environment means engagement typically occurs at very short distances and fire fights are swift and brutal. The continuous high-level alertness required for close action,

¹⁴ On the interaction of bad policy with tactics, see, David Betz and Hugo Stanford-Tuck, “Teaching Your Enemy to Win,” *Infinity Journal* 6, no. 3 (Winter 2019): 16–22, https://www.infinityjournal.com/article/212/Teaching_Your_Enemy_to_Win/. A compelling case for the rectification of the relative isolation of tactics from scholarship on war is made by B.A. Friedman, *On Tactics: A Theory of Victory in Battle* (Annapolis, MD: Naval Institute Press, 2017).

¹⁵ See, *Land Operations*, Land Warfare Development Centre, Army Doctrine Publication AC 71940, (2017), 4-01; see also *Operations in the Urban Environment*, Land Warfare Development Centre, Doctrine Note 15/13, 59–60.

¹⁶ Sun Tzu, *The Art of War* in, *Classics of Strategy and Counsel Vol. 1: The Collected Translations of Thomas Cleary* (Boston: Shambhala Publications, 2000), 74.

¹⁷ Clausewitz, *On War*, 139–41.

combined with extreme physical discomfort, is thought to hasten the onset of battle fatigue.¹⁸ Command and control is bedeviled by communications problems caused by buildings that block both vision and radio signals. This, in turn, causes city battles to fragment rapidly into isolated and uncoordinated low-level fighting. If this kind of fighting is hard for professional soldiers who are trained in taking initiative, confident in their equipment, and physically prepared for the rigor involved, then how much harder is it for the less well-trained — or even untrained — conscript or amateur?

Meanwhile, the presence of civilians in the urban environment adds a complicating element of friction that pervades every level, from tactics through strategy to policy. Indeed, Alice Hills, author of perhaps the most significant academic study on the challenges of urban warfare, describes the intractability of the problem as moral and normative in nature and therefore a particular concern for liberal states.¹⁹ On the one hand, history suggests that there are conceivably many political, humanitarian, and legal reasons for even pacific liberal states to intervene in foreign cities, such as to conduct a strategic raid on specific facilities (e.g., weapons laboratories), to evacuate noncombatants, or to forestall genocide. (Imagine, for example, a raid on *Radio Mille Collines*, effectively the command-and-control system of the massacre of the Rwandan Tutsis.) On the other hand, such intervention risks becoming bogged down in a form of warfare that can exact a great toll on civilians and civilian infrastructure.

How can commanders maximize their forces' military effectiveness, which is necessary given the high costs of keeping personnel and equipment in the field, while maintaining domestic and international support in a media-saturated environment, where that support is dependent in large part on keeping casualties and collateral damage below an indeterminate threshold of public acceptability?²⁰ The 1992–93 American-led U.N. intervention in Somalia remains a textbook example of this problem: It was a humanitarian operation initially that ended ignominiously as a small war following a vicious battle in the streets of Mogadishu in which two American helicopters were shot down, 18 American soldiers were killed, 72 were wounded, and a pilot was captured.²¹

It is no wonder, then, that when at all feasible the most politically desirable operation is one that involves no troops on the ground at all, no matter what the terrain. The 1999 Kosovo War, which NATO conducted almost entirely from the air, epitomized this line of strategic reasoning. Wesley Clark, the commanding general of the campaign, wrote in his account of the war about the political wrangling that took place over conducting a ground offensive and the likely casualties that would ensue. He remarked,

there was no military answer to the problem of urban warfare in Belgrade. Or the determined resistance of the Serb population along the way. The northern approach included the classic invasion routes, which the Yugoslav military would be well prepared to defend. I knew that the political problems for NATO would be insuperable.²²

¹⁸ Gregory J. Ashworth, *War and the City* (New York: Routledge, 1991), 121. See also Todd C. Helmus and Russell W. Glenn, *Steeling the Mind: Combat Stress Reactions and their Implications for Future Warfare* (Santa Monica, CA: RAND, 2005), 39–67.

¹⁹ Alice Hills, *Future War in Cities: Rethinking a Liberal Dilemma* (London: Frank Cass, 2004).

²⁰ Hills, *Future War in Cities*, 229 and chap. 9.

²¹ See Theo Farrell, "Sliding Into War: The Somalia Imbroglio and US Army Peace Operations Doctrine," *International Peacekeeping* 2, no. 2 (1995), <https://doi.org/10.1080/13533319508413551>.

²² Wesley K. Clark, *Waging Modern War* (New York: Public Affairs, 2001), 318.

Since the advent of the “War on Terror,” avoiding putting “boots on the ground” has been far more difficult from a tactical perspective, particularly after the invasion of Iraq in March and April 2003. The appetite of all Western governments, including the United States, for the large-scale deployment of conventional forces has diminished markedly since the early days of the conflicts in Iraq and Afghanistan. As a case in point, Britain embarked more or less enthusiastically on the Iraq War, with Parliament voting 412 in favor and 149 against in 2003.²³ However, by August 2013, the Cameron government’s proposal to join American-led air strikes in Syria was defeated narrowly by a vote of 285 to 272. Even so, fully detaching from ongoing conflicts has proven extremely difficult.

More recently, Western involvement in wars in the Middle East, and to a lesser extent Ukraine, has primarily involved airpower alongside special forces and small advisory teams in support of local forces — a far more politically palatable approach. The character of operations, however, has still been typified by the attack and defense of fortified locations, or urban areas that can be rapidly fortified (whether deliberately or as a by-product of combat), and operations that unfold over weeks and months, not hours and days. Ukrainian officers, for instance, characterized the months-long defense of the Donetsk Airport — a “serpentine grid of tunnels, bunkers, and underground communications systems” — against rebel forces of the Donbass Republic as a “mini-Stalingrad.”²⁴ In the Philippines, meanwhile, government forces needed five months to clear a force of about 1,000 Islamic State-affiliated Abu Sayyaf militants from Marawi, a town of 600,000 inhabitants that was significantly damaged in the process.²⁵

Undoubtedly, what primarily distinguishes cities from other theaters of conflict is the level to which they are intermingled with civilian life. But population centers can only be bypassed for so long in the hope of avoiding a military operation in the midst of a major concentration of noncombatants. At some point, one eventually gets to Baghdad or Mosul, or to Aleppo or Raqqa. Then what?

The history of warfare is littered with instances of urban fighting. As the great historian of cities Lewis Mumford put it, war and the city are inextricable: “As soon as war had become one of the reasons for the city’s existence, the city’s own wealth and power made it a natural target.”²⁶ If you choose to fight “wars amongst the people,” as today’s wars have been described, then you must literally get among them.²⁷

In the mind of the contemporary Western politician, conflict in the urban environment — getting “amongst the people” — is synonymous with Stalingrad, and, as such, is beyond the public’s tolerance in terms of expenditure of “blood and treasure.” In order for the military to be able to present politicians with a full spectrum of credible and usable options, this assumption needs to be challenged. Currently it is based upon extant military doctrine — and,

²³ “Iraq — Declaration of War — 18 Mar 2003 at 22:00,” The Public Whip, March 18, 2003, <https://www.publicwhip.org.uk/division.php?date=2003-03-18&number=118&display=allpossible>.

²⁴ Oliver Carroll, “Inside the Bloody Battle for Ukraine’s Donetsk Airport,” *Newsweek*, Feb. 3, 2015, <http://www.newsweek.com/2015/02/13/inside-bloody-battle-ukraines-donetsk-airport-304115.html>.

²⁵ 165 government troops, 45 civilians, and practically all of the Abu Sayyaf fighters were killed. The damage to the city may be seen in this photo essay: “Marawi in Ruins After Battle Against Pro-ISIL Fighters,” *Al Jazeera*, Oct. 23, 2017, <https://www.aljazeera.com/indepth/inpictures/2017/10/marawi-ruins-battle-pro-isil-fighters-171023071620271.html>

²⁶ Lewis Mumford, *The City in History: Its Origins, Its Transformations, and Its Prospects* (London: Harvest/HBJ, 1961), 43.

²⁷ Rupert Smith, *The Utility Of Force: The Art of War in the Modern World* (London: Allen Lane, 2005).

presumably, on the private advice of generals to policymakers — which says that urban conflict requires an approach that is reliant upon massive firepower and overwhelming manpower. But reports from practitioners at the tactical level and in training establishments, coupled with examples from military history, falsify this thesis. It is wrong — there is a different way.

II. Nothing Fundamental Has Changed

It is hard to gainsay Hills' conclusions, particularly with regards to the primacy of politics. And yet, while she is cautious not to overemphasize the novelty of the problems she describes, writing that the "characteristics and tactical constraints of urban operations have remained remarkably consistent over the past 60 years," because she rejects a longer historical approach, she misses that this statement would have been just as true 2,000 years ago.²⁸ The challenges of urban warfare that confront this generation of soldiers and statesmen are, for the most part, not new. Even the challenges that might seem new, such as the prevalence of the media, are only superficially different or, at most, an amplified echo of the past.

Two examples from history show that governments have long been drawn into faraway urban conflicts with nonstate actors, and found them hard to fight, for reasons including political interconnectedness, media influence, and tactical complexity. Consider first the following scene from Flavius Josephus' *The Jewish War*, which recounts a critical battle in the siege of Jerusalem by Roman legions under the command of Titus, son of the emperor Vespasian in the year 70 AD:

Threatening death to any of the populace who would breathe a word about surrender, and butchering all who even spoke casually about peace, they attacked the Romans who had entered. Some confronted them in the streets, some assailed them from the houses; while others, rushing forth without the wall through the upper gates, so disconcerted the guards at the ramparts, that they sprang down from their towers and retreated to their camp. Loud cries arose from those within, who were surrounded by enemies on all sides, and from those without, in alarm for their comrades who had been left behind.

The Jews, constantly increasing in numbers, and possessing many advantages in their knowledge of the streets, wounded many of the enemy, and drove them before them by repeated charges; while the Romans continued to resist mainly from sheer necessity, as they could not escape in mass owing to the narrowness of the breach; and had not Titus brought up fresh succours, all who had entered would probably have been cut down. Stationing his archers at the end of the streets and taking post himself where the enemy was in greatest force, he kept them at bay with missiles. Domitius Sabinus, who in this engagement, as in others, showed himself a brave man, aiding his exertions. Caesar held his ground, plying his arrows incessantly, and checking the advance of the Jews, until the last of the soldiers had retired.²⁹

That this battle involved swords and clubs rather than M-4s and AK-47s matters little — just replace "archers" and "arrows" with "close combat attack" and "armed aviation" and the scene has an obvious contemporary resonance. Moreover, the tactics of the Jewish rebels differed little from those of, say, Islamic State insurgents in the months-long battle for Mosul in Iraq. Zealots among Jerusalem's defenders murdered all moderate Jewish leaders and burnt the city's dry food supply, which would have fed the population for a year or two, on the logic that it would compel noncombatants to join the fight. In fact, it only compounded the tragedy. More

²⁸ Hills, *Future War in Cities*, 243.

²⁹ Flavius Josephus, *The Jewish War*, Vol. 2, trans. Robert Traill (London: Houlston and Stoneman, 1851), 143.

Jews died of the starvation brought on by the zealots than were killed by the Romans in the collective punishment that followed the defeat of the revolt.

The wider political complexity of the campaign and its distinct and immediate connections to politics in the Roman capital over 2,300 miles away are equally noteworthy.³⁰ At the time of the battle, Vespasian had been emperor for just one year and the defeat of a Roman army, especially one commanded by his son, would have greatly undermined his power. Also bear in mind that Flavius Josephus was not an objective historian but rather a hagiographer. Famously described as the “Jewish Benedict Arnold,” he was quite literally owned by Titus and was conscious of the need to preserve and advance the celebrity of his master.³¹ Thus, one must read between the lines of this account to see that what it describes is a tactical blunder by Titus, who advanced his troops prematurely through a too-small breach, and was then rescued from disaster by a competent subordinate, in addition to artillery support.

In the introduction to her final chapter, “The Logic of Urban Operations,” Hills writes that the most important reason for examining urban battles is that they have the potential to become a critical security issue in the 21st century on account of, inter alia, demographic trends, globalization, and powerful nonstate adversaries. Cities are, moreover, not just politically significant but also economically significant as “base points” in a global web of production and markets, which conflict would disrupt.³² And yet, the idea that the impact of urban warfare is increasingly strong — whether by resonating powerfully in international politics, causing upheaval in global markets, or impacting the mood of distant populations — has been true for at least two centuries, possibly even two millennia.

For instance, in late June of 1806, British forces under the command of Adm. Sir Home Popham landed at the Rio de la Plata, Argentina with the aim of capturing Buenos Aires and ultimately seizing one of the greatest and richest Spanish colonies in South America. It was not a strategically planned gambit. In fact, Popham had acted independently on his own judgment as a commander, having convinced himself that the people of the region were “groaning under the tyranny” of Spain and eager for liberation. He also considered it an opportunity to counter Allied setbacks in the European theater — notably Napoleon’s victory at the Battle of Austerlitz in December 1805.³³

But ministers in London, once they learned of the event, thought he had vastly exceeded his authority. Their fury, however, was largely assuaged by the initially agreeable results: A superior Spanish military force was quickly routed at the cost of a handful of British casualties and Buenos Aires was occupied. The then vast sum of \$1,086,000 was sent back to Britain by frigate along with six wagon-loads of other booty — primarily Jesuit’s bark (a valuable antimalarial) and mercury. A large quantity of arms and ammunition was also seized from abandoned and surrendered Spanish armories. Financial markets in London soared in

³⁰ Indeed, it is arguably one of the most consequential battles of all history. Without the destruction of Jerusalem, religious scholars reckon that Christianity might not have arisen as the dominant faith of the West centered on Rome. See Diarmaid MacCulloch, *Christianity: The First Three Thousand Years* (London: Penguin, 2009), 111. In colloquial Spanish, a phrase probably brought by Sephardic Jews and their descendants fleeing the massacre, “mas malo que Tito” (worse than Titus), survives in common use to this day.

³¹ For a discussion of the merits of the traitorous appellation of Flavius, see William den Hollander, “Was Josephus a ‘Jewish Benedict Arnold?’” *Mosaic*, Nov. 14, 2014, <https://mosaicmagazine.com/picks/uncategorized/2014/11/was-josephus-a-jewish-benedict-arnold/?print>.

³² Hills, *Future War in Cities*, 242.

³³ The section of this paper dealing with the British in Argentina in 1806–07 is based upon Ian Herson, *The Savage Empire: Forgotten Wars of the Nineteenth Century*, (Stroud, Gloucestershire: Sutton Publishing, 2000).

anticipation that the good times would continue to roll. Unfortunately, by the time that these treasures had arrived in Britain, and reinforcements had been dispatched, events had already turned decidedly for the worse.

While the British certainly did plunder the assets of the deposed Spanish regime, they took some care not to “exasperate” the local population, as counter-insurgency doctrine has wisely advised for over a hundred years.³⁴ Thus, private property was untouched; the population, which was regarded as liberated rather than conquered, was protected; local government, courts, and tax authorities were permitted to continue as normal; and the place of the Catholic Church in society was left untouched. It was to little avail, however, for two reasons. First, the improvisational nature of the campaign caused even those locals who were happy to see the end of Spanish rule to doubt the long-term intentions of the British, which in turn caused political unrest. Second, Santiago de Liniers y Bremond, a Knight of the Order of Malta in the service of Spain, played upon the unpacified mood of the population to organize a powerful insurgency out of a ragbag of escaped regular soldiers, angry civilians, and thrill-seeking gauchos.

The result was a bitter humiliation for Great Britain, which resulted in the court-martial of the officer in charge of operations. Ironically, this was not Popham, who escaped immediate blame by moving on before things came to a head, but Gen. John Whitelocke, who had arrived in May 1807 with a small army of 6,000 troops under orders to recover the worsening situation with another assault on Buenos Aires.

The fighting in the capital and the surrounding area proved insurmountably difficult for the British, who discovered that the thick walls and flat roofs of the Spanish colonial urban landscape cut through by narrow alleys provided endless opportunities for ambushes. In scenes reminiscent of Titus’ premature foray into Jerusalem, British soldiers were assailed from the roofs by a great proportion of the population with hand grenades, musket fire, stones, and boiling water, while at nearly every major street corner they were attacked by Spanish cannons loaded with grape-shot, which were stationed behind deep ditches that were reinforced by sharpened stakes.

The war has generally been forgotten by Britons, but not Argentinians, for whom it was a precursor to revolution and independent nation-building.³⁵ It was unquestionably a “hybrid” battle with a mix of regular and irregular modes of warfare.³⁶ It also included the exploitation of clan, tribal, and illicit networks in order to sustain the insurgent fighting forces. In the final battles on the streets of Buenos Aires, de Liniers achieved the operational and tactical feat of deploying the most primitive arms alongside what were then cutting-edge ones.

This is to say nothing of the political complexity of the conflict, which was substantial and wide-ranging. Tactical decisions in the local contest between Spanish colonial rulers, indigenous people, and their British liberators-cum-conquerors resonated very quickly in the distant capitals of London, Madrid, and Paris. Likewise, the effect on financial markets was a

³⁴ The advisement not to “exasperate” is one of the characteristically economical and wise principles of the British counterinsurgency guru C.E. Callwell in his classic, *Small Wars: Their Principles and Practice*, 3rd ed. (London: His Majesty’s Stationery Office, 1906). The contemporary influence of the work is discussed in, David Betz, “Counter-insurgency, Victorian-Style,” *Survival* 54, no. 4 (2012): 161–82, <https://doi.org/10.1080/00396338.2012.709395>.

³⁵ A painting entitled “La Reconquista de Buenos Aires,” by the French artist Charles Fouqueray showing the dejected British commander, Gen. Beresford, surrendering to de Liniers hangs proudly in the Argentine National Historical Museum, Buenos Aires.

³⁶ Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, 2007).

powerful factor driving political and military decision-making. There was a media dimension as well: first, in the enthusiastic celebration of Popham — who was acutely conscious of his celebrity — and, second, in the public pillorying of Whitelocke.

One of the main conclusions of important scholars like Hills is that, although tactics of urban warfare have changed little, the strategic context has evolved considerably as a result of globalization, demography, and urbanization. And yet, based on examples from history, it would seem that the strategic context has not actually changed in any fundamental way.

III. ‘Stalingraditis’ and Other Urban Legends

To say that there is little in today’s world that has not been seen or dealt with in the past is not to say that there is nothing new at all. Likewise, to say that present-day strategists exaggerate how much they are affected by the connectedness, complexity, and sheer riskiness of the world relative to their forebears is not to say that they do not face challenges. It is, rather, that strategists today will be better able to deal with such challenges if they are clear-eyed about what is new and what is not, and what lessons can be generalized — so long as they do not sever themselves entirely from the experience and knowledge of the past.

In a recent keynote speech on the past, present, and future of urban warfare, the British military historian Antony Beevor, author of numerous works on World War II, including the classic *Stalingrad*, detailed a number of lessons that can be gleaned from that battle. First, he argued, commanders lose control of the battle more rapidly in urban environments than they do in others — it is, according to Beevor, intrinsically more difficult terrain on which to fight than any other. Second, cities are imbued with a symbolic resonance that makes them dangerous objectives for politicians. This makes them wont to devote more resources to them than their strategic value merits. Third, the defender usually determines the tactics in cities — a key advantage, and one that normally accrues to irregular more so than regular forces. Fourth, fighting in cities consumes far more troops than planners usually imagine while the urban environment diminishes the advantages of superior conventional weaponry, mobility, and training.³⁷ Beevor concludes that “there is something pitiless about urban warfare.” All of these lessons, including particularly the last one, are surely true of Stalingrad, and, in one form or another, one finds them repeated in British, American, and NATO doctrine.³⁸ The trouble is, however, that none of these lessons are generalizable, and thus it can be misleading when they are treated as such.

The Myth of Intrinsic Difficulty: Is Urban Terrain the Hardest?

Beevor claims that the urban environment is intrinsically difficult. This difficulty, however, is neutral, manifesting differently, but with equal impact, upon all sides. It is perhaps truer to say that the urban environment is more difficult to fight in for a commander who is not down at the small-team level. But tactical and operational victories are made up of small-team successes. The commander in charge of a small team can, in real time, take advantage of the multiple approach routes, the variety of possible sources of fire support, and the opportunities for surprise that the environment presents. The closeness of the terrain often allows commanders at this level to get further forward than would otherwise be possible and thus leads to them making rapid decisions with better information.

In the urban context, a main benefit of a high-tempo maneuver operation over a methodical firepower-driven one is that the former deprives the defenders of the time to fortify, particularly by employing improvised explosive devices (IEDs), which have proven a difficult challenge

³⁷ Sir Antony Beevor, “Keynote Speech,” Urban Warfare: Past, Present, and Future Conference, Royal United Services Institute, Feb. 2, 2018.

³⁸ *Joint Urban Operations*, Joint Publication 3-06, Joint Chiefs of Staff, Nov. 20, 2013, I-5-I-9, https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_06.pdf.

for attacking forces, as well as a serious impediment to post-war rebuilding efforts. For instance, in the recent fighting with Islamic State forces in Mosul, Iraq, it was discovered that a single hospital complex had been laced with approximately 1,500 IEDs.³⁹ In this context, maintaining operational tempo could allow the attacking commander to continue to make military gains and deny the enemy time to place such devices, so long as the political situation is amenable. Moreover, a less firepower-intensive approach is likely to be a factor in maintaining political will and public consent.

Nevertheless, small-unit maneuvering in a dispersed manner within cities presents some obvious challenges. These include having fewer safe rear areas and fewer heavily protected routes for supply and reinforcement and medical evacuation. There are, however, technological changes that may significantly alleviate these concerns, as discussed below.

It is frequently observed that one of the great advantages of operating in “uncluttered” places like deserts, as opposed to cluttered urban centers, is that, whereas the former presents a logistical challenge, the dearth of civilians is an advantage. A German general captured by the British during the North Africa campaign in World War II put it this way: Desert fighting was a “tactician’s paradise and the quartermaster’s nightmare.”⁴⁰ This is based, however, on something of a misapprehension — that in environments outside of towns and cities one is not operating among the people.

Even in the Libyan deserts, on the tracts of the desolate Sahara, a military commander is still operating amid a civilian population that may exert a direct impact on his operations. One can see this, for example, in the memoirs of Vladimir Peniakoff, one of the most colorful officers of British military history, who was commander of “Popski’s Private Army” — a legendary desert reconnaissance and raiding force in North Africa. Peniakoff described the manner of his operations and planning in this way:

What I like to do is to go myself beforehand over the country and get the feel of the plains, the mountains, and the valleys; the sand, the rocks, and the mud; *at the same time, I listen to the local gossip; find out who commands the enemy and what are his pastimes—who my friends are and how far they are prepared to help me and what are the presents that will please.* Then, when I come back later with my men to carry out my evil schemes, I can let the plan take care of itself.⁴¹

In other words, while the presence of civilians in the city is indeed a factor that adds to the complexity of the operating environment, this is also the case in other environments, even ones that seem, at first glance, to be relatively uncluttered. Replace plains, mountains, and valleys with boulevards, streets, and alleys, or sand, rocks, and mud with apartment complexes, shopping malls, and industrial parks, and it does not fundamentally change Peniakoff’s admonition about how to plan and lead a military operation. Though the density of habitation may change, war remains a human endeavor that takes place among people.⁴² When it comes to warfare on land, there is no unpeopled place where combat can occur without reference to

³⁹ *Report on the Protection of Civilians in the Context of the Ninewa Operations and the Retaking of Mosul City, 17 October 2016-10 July 2017*, United Nations Assistance Mission for Iraq, undated, 2, [http://www.uniraq.org/images/factsheets_reports/Mosul_report%2017Oct2016-10Jul201731%20October 2017.pdf](http://www.uniraq.org/images/factsheets_reports/Mosul_report%2017Oct2016-10Jul201731%20October%202017.pdf).

⁴⁰ Quoted in James Holland, *Together We Stand: Turning the Tide in the West: North Africa, 1942-1943* (London: HarperCollins, 2005), 24.

⁴¹ Emphasis added. Vladimir Peniakoff, *Popski’s Private Army* (London: The Reprint Society, 1953), 55.

⁴² Jim Storr, *The Human Face of War* (London: Continuum Press, 2009).

noncombatants, as though in a gladiatorial ring where bloodied fighters are clearly sequestered from the onlookers.⁴³

Urban warfare is undoubtedly fraught with serious difficulties, but so too is warfare in every environment. Rote pronouncements of its supremely challenging nature are unhelpful. Rarely are the potential *advantages* of operating in an urban environment considered. When questioned on this, however, our interlocutors remarked on several such advantages. For one thing, civilian observation and digital connectedness could be an intelligence resource to friendly forces. For another, the wealth of possible routes into and around the city could enable small unit movements and offer plentiful cover and concealment. The relatively short range of engagements can lead to greater visibility of the enemy allowing precision and, therefore, a *possible* reduction in the need to use indirect fire and a concomitant reduction in collateral damage.

Moreover, outflanking the enemy is easier, as is isolating enemy positions. In sporting terminology, it is easier to create the “one-on-ones” that afford the team’s best players the opportunities to use their skills to the team’s advantage. In addition, the presence of the media need not be seen as a bad thing, as it could allow commanders to focus world attention for information operations or deception purposes. Finally, the dependence of some adversaries on one or more urban areas for their own sustainment — logistics, popular support, and so on — are potential centers of gravity that can be attacked.

The enormous logistical advantages of operating in proximity to working port facilities was noted frequently by those we interviewed and studied. Indeed, it is striking in speaking to and reading the accounts of commanders of many post-Cold War operations how little they highlight the difficulties of urban environments as compared to other complaints. Problems of logistics, as always, feature prominently. An Australian commander in the 2000 East Timor operation, for example, described how he had to have four transport ships run ashore on the beach at Suai, where engineers cut the hulls open with oxyacetylene torches so that desperately needed supplies could be removed with a front-end loader — a triumph of improvisation but hardly an ideal manner in which to operate.⁴⁴

For all the difficulties of operating in urban settings, as long as the city is still functioning to some degree, the opportunities for “living off the land” are significantly greater than in most other environments. Fuel, electricity, water, food, shelter, medical facilities, communications facilities, places where repairs can be done, and the equipment with which to do such repairs are abundant in metropolitan settings — and in short supply outside of them — precisely because of the densely interconnected nature of the city.

Triumph of the Lack of Will? On the Symbolic Importance of Cities

The evidence surrounding the symbolic importance of cities and its hold on the minds of politicians is also quite mixed. One of the major problems with using Stalingrad as a benchmark is that it was extremely unusual in the strength of its political symbolism. For Stalin and Hitler, both unbridled totalitarian autocrats, the battle was a proxy for a personal and ideological contest — a test not only of each other’s will but of the total national strength they could command. Thus, neither could contemplate retreat or surrender, causing both men to hurl

⁴³ A point made particularly clearly by Smith in, *The Utility of Force*, 284–85. British urban warfare doctrine specifically notes Smith’s paradigm of “war amongst the people” as a key driver of the need of the aforementioned concept of “integrated action.” See, *Operations in the Urban Environment*, 59.

⁴⁴ Duncan Lewis, “Lessons from East Timor,” in, *Future Armies, Future Challenges: Land Warfare in the Information Age*, ed. Michael Evans, Russell Parkin, and Alan Ryan (Crows Nest NSW, Australia: Allen and Unwin, 2004).

division after division into the cauldron of fire. This has not been the case, however, in more recent urban battles.

If Fallujah had been renamed George Bush-ville after the first battle there in 2004, or if Sadr City was renamed Barack Obama City after the Obama administration took over the Iraq War, then a comparison with Stalingrad would perhaps be a bit more apt. The fact is, though, that American and British urban operations in Iraq after 2003 were, on the whole, characterized by a decided lack of sustained political concern as politicians and military-strategic headquarters back home urged caution and retreat on local commanders for fear of costly entanglement. Towns and cities were thus repeatedly cleared, or at any rate temporarily pacified, only to be subsequently abandoned to insurgents. Clearly neither city held particular symbolic importance for the United States or Great Britain. Instead, lack of will has tended to be more typical of urban battles in recent years.

It must be said that Britain lately has been more guilty of this than the United States. The reasons why are not terribly mysterious: As the junior partner in the expeditionary campaigns of the “War on Terror,” Britain’s political and military leadership has perceived that it has less skin in the game and less responsibility for the ultimate outcome.⁴⁵ The best example of this lack of will is the British occupation of Basra, Iraq, which is described frankly in a vignette in the most recent British Army doctrine. It shows that much of the United Kingdom’s difficulties in southern Iraq stemmed from a lack of political will and an excess of caution in London. In essence, they were quite willing to give up Basra to insurgent control more than once.⁴⁶

When looking for an example of how political equivocality and strategic lassitude can exert a baleful influence on tactics in urban operations, it is hard to beat what took place on the morning of Oct. 23, 1983: A truck packed with 12,000 pounds of TNT was driven by a Shiite commando into the headquarters of the 22nd Marine Amphibious Unit in Beirut, where it exploded, killing 241 Americans almost instantaneously. A congressional inquiry into the attack concluded afterward that security had been “inadequate” and that the local commander had made serious errors of judgment. Yet, security was inadequate by design, though not the local commander’s. Taking stronger security measures would have clashed with the diffident political goals of the intervention, according to the U.S. ambassador to Lebanon. Moreover, given that before the attack the facility had been visited by no fewer than 24 generals and admirals, the question arises why the local commander’s putative errors were not remarked upon and rectified.⁴⁷ The fact is that the Marines were in a tactically indefensible posture because policymakers decided the political situation required it and generals advised them incorrectly about the risks, or argued inadequately as to their severity.

For the Marine Corps, the Beirut attack was a major blow — the worst loss of life in a single day it had suffered since the Battle of Iwo Jima in 1945. For the United States as a whole, it was an embarrassing setback, but it was not terribly consequential. Indeed, on the day of the attack, President Ronald Reagan signed the order authorizing the military intervention in Grenada.⁴⁸ This illustrates something that has typified the West’s “limited wars” since the era of decolonization: that although not always “low intensity” from the point of view of the

⁴⁵ For further elaboration on this, see, David Betz and Anthony Cormack, “Iraq, Afghanistan and British Strategy,” *Orbis* 53, no. 2 (Spring 2009), 319–36, <https://doi.org/10.1016/j.orbis.2009.01.004>; and David Betz, *Carnage and Connectivity: Landmarks in the Decline of Conventional Military Power* (London: Hurst, 2015), esp. chap. 5.

⁴⁶ Betz, *Carnage and Connectivity*, 31.

⁴⁷ See, the chapter on Beirut and the Reagan era intervention in Lebanon in Peter Huchthausen, *America’s Splendid Little Wars: A Short History of U.S. Military Engagements, 1975-2000* (London: Viking, 2003), 45–64.

⁴⁸ Huchthausen, *America’s Splendid Little Wars*, 62.

immediate participants, politicians have always considered it a strategic option to pack up and go home (i.e., to lose), or move on to a different small war.

Stalingrad, on the other hand, was unlimited. In fact, it was arguably the most completely committed battle of history's most total war to date, rivalled only by the Battle of Berlin in the spring of 1945. As an illustration, consider the radio speech delivered by Reichsmarschal Hermann Goering in late January 1942 as the German defenses were collapsing:

[L]ike a mighty monument is Stalingrad.... One day this will be recognized as the greatest battle in our history, a battle of heroes.... We have a mighty epic of an incomparable struggle, the struggle of the Nibelungs. They, too, stood to the last.⁴⁹

Despite Goering's bombast, there is a kernel of truth to what he said: Stalingrad was undeniably stupendous and practically incomparable. Thus, to employ it as the yardstick by which all urban warfare is measured in perpetuity is deeply problematic.

The Myth of the Defensive Advantage: Who Really Determines the Tactics?

Good militaries increase in competence as they fight. Learning the hard lessons that a tenacious adversary can teach and armed conflict serves to cement is part of war.⁵⁰ For example, one might contrast the battles of Caen and Groningen, the former in June 1944 and the latter in April 1945. Both were urban conflicts and involved the same protagonists — the British and Canadians versus the Germans. Caen was a costly Allied victory, slow and nearly Pyrrhic, with a heavy toll of civilian casualties caused by high-level bombing and artillery barrages. Groningen, on the other hand, was a quick fight. It was decisive and caused few civilian casualties and involved the use of lighter, more discriminate weapons.

It was not that the tactics themselves changed much between the two battles, but that they were simply better executed.⁵¹ As a military force increases in tactical proficiency, it is able to secure political objectives without recourse to the kind of overwhelming firepower that destroys the city. Concurrently, as victory comes closer to hand, the minds of politicians turn more toward thoughts of "winning the peace" and thus the military becomes tactically less free to employ destructive measures such as mass aerial bombing and artillery barrages.

It is not true, as Beevor argues, that the defender usually determines the tactics employed in urban fighting. There are so many examples to the contrary that, at best, it might be said that this is *sometimes* the case. Israel, for instance, has repeatedly been successful in determining the tactics in its fights with entrenched Palestinians in the West Bank and Gaza at various times since the high point of violence of the Second Intifada in the early to mid-2000s. One oft-cited example is the way the Israelis conducted their attack on the town of Nablus in 2002 by "inverting the map" or "walking through walls ... like a worm that eats its way forward" — using roads as barriers rather than thoroughfares, and using the interior of buildings as roads rather than a series of impermeable walls.

⁴⁹ Quoted in, William Craig, *Enemy at the Gates: The Battle for Stalingrad* (London: Book Club Associates, 1973), 373.

⁵⁰ Alec Wahlman credits American success in urban operations, despite the lack of consistent effort to prepare for it specifically, to two factors: transferable competence (i.e., the applicability of skills, techniques, and equipment not designed specifically for urban conflict), and battlefield adaptation, in, *Storming the City: U.S. Military Performance in Urban Warfare from World War II to Vietnam* (Denton, TX: University of North Texas Press, 2015), 237–46.

⁵¹ A point that Jim Storr argues holds true for the Allied armies in general in World War II. See, *The Hall of Mirrors: War and Warfare in the Twentieth Century* (Warwick, UK: Helion and Co., 2018), 155.

We interpreted the alley as a place forbidden to walk through, and the door as a place forbidden to pass through, and the window as a place forbidden to look through, because a weapon awaits us in the alley, and a booby trap awaits us behind the doors. This is because the enemy interprets space in a traditional, classical manner, and I do not want to obey this interpretation and fall into his traps.⁵²

The reference to interpretation and reinterpretation of space shows the influence of postmodern and post-structuralist theory, which was popular in Israeli military thinking at the time. This was unfortunate because it obscured what otherwise was solid advice to commanders thinking about urban operations.⁵³ The fact is that no army that has fought in an urban environment for much time interprets space in a “traditional” manner. It adapts. It quickly learns to keep infantry off narrow streets that are easily raked by fire from entrenched positions, and to move forward by “mouseholing,” using the outer walls and roofs of buildings as natural cover under which to approach enemy positions and blow them up.

Arguably, no army knows this as well as Israel’s. After all, one of the preeminent examples of successful urban warfighting comes from Israel’s War of Independence. In just six days of intense fighting beginning on April 26, 1948, a lightly armed, 600-strong force of Irgun — a Jewish paramilitary-cum-terrorist group headed by Menachem Begin, who later became prime minister — dislodged an entrenched and well-armed Arab military force more than twice its size from the city of Jaffa. The Irgun then defended its gains against counterattacks by a much larger British combined-arms force, which had the benefit of naval gunfire and air support.⁵⁴ The example of Jaffa contradicts the argument that urban warfare necessarily favors the defense over the offense — the Irgun was quite successful at both in the same battle. It also raises questions about the argument, discussed below, that urban operations are necessarily highly demanding in terms of manpower given that the Irgun were decidedly outnumbered.⁵⁵

The defending force can only determine the tactics of the attacking force so long as the attacker does not put the defender under cognitive as well as physical pressure. A steady, deliberate approach at the tactical level allows the enemy time to orient himself to the threat and then bring assets to bear to counter it. The attacker is then forced to win through the combination of weight and accuracy of firepower. The object of the attacking force ought to be to put the defending force into a state of material surprise, a condition in which, even if it is aware of the

⁵² Quoted in, Eyal Weizman, *Hollow Land: Israel’s Architecture of Occupation* (New York: Verso, 2012), 198.

⁵³ Weizman, *Hollow Land*. The insistence of Israeli military strategists in the Operational Theory Research Institute on using such terms did much harm to their cause insofar as it freighted a good deal of common sense with language that made it incomprehensible to those who needed it. A point remarked upon by the post-2006 Lebanon War report on the perceived Israeli failings there. See, *Winograd Commission: The Commission to Investigate the Events of the 2006 Lebanon Campaign*, State of Israel, January 2008 [in Hebrew]. See also Eyal Weizman, “Walking Through Walls: Soldiers as Architects in the Israeli/Palestinian Conflict,” Lecture at the Arxipelago of Exception conference, Centre de Cultura Contemporània de Barcelona, Nov. 11, 2005.

⁵⁴ Benjamin Runkle, “Jaffa, 1948,” in, *City Fights: Selected Histories of Urban Combat from World War II to Vietnam*, ed. John Antal and Bradley Gericke (New York: Ballantyne, 2003), 289–314.

⁵⁵ The historiography of the Jaffa battle is complex and contested. The post-1948 Israeli Defense Forces had good reason to downplay the contributions of the Irgun. In the Irgun Museum in Tel Aviv, the battle is portrayed as a triumph. There are no good detailed accounts from the British side. It is apparent though, for obvious reasons, that in 1948, the eagerness of British forces to fight was small as they were withdrawing from Palestine. Thanks to Dr. Eitan Shamir from the Political Science Department at Bar Ilan University for reviewing the Hebrew sources on our behalf.

presence of the attacker, it will be unable to prepare accordingly for contact.⁵⁶ The deliberate approach is expensive in materiel if not manpower and can kill many civilians and heavily damage infrastructure. However, if the attacking force overwhelms the defending force's ability to make decisions at the lowest level through speed, aggression, and simultaneous action in as many places as possible at the same time, then the defender will be unable to choose the tactics. It will be too busy trying to survive to dictate the terms of any engagement.

Numbers in Urban Warfare: Force Competence Trumps Force Size

There is perhaps no idea about urban warfare that is more firmly fixed than the idea that urban operations are unusually manpower-intensive. Towns and cities are typically thought to have the potential to absorb enormous numbers of soldiers — even if they are undefended. This stems, it is argued, from the size and geographical and architectural complexity of the environment. Guiding a force through all the potential bottlenecks of a city is time-consuming and difficult, while guarding against potential attacks at vulnerable locations and warding off re-infiltration of cleared areas soaks up troops.⁵⁷ The Soviet General Staff is reputed to have calculated on the basis of its experience during World War II that the optimum ratio of attacker to defender in urban environments was 10 to one. This would be a major impediment to anyone contemplating fighting in a city, and is a clear case of Stalingrad-itis. Other major battles of the war, however, would point to an opposite, or at any rate more nuanced, conclusion.

First, in October 1944, two battalions of the American 26th Infantry Division (with armor and engineering attachments) soundly defeated a much larger entrenched German force of 5,000 troops in nine days of fighting in the city of Aachen.⁵⁸ Seventy-five Americans were killed and the German force that had been ordered by Hitler to fight to the last man was essentially wiped out. Second, in April 1945, elements of the 2nd Canadian Division defeated a German force of equal size that was trying to hold on to the Dutch city of Groningen. In that case, only 100 civilians were killed alongside 43 Canadians and approximately 150 Germans — a remarkable feat given that the civilian population was present throughout the fierce fighting.⁵⁹ Finally, also in April 1945, a battalion of the 6th Gurkha Rifles, supported by tanks of the King's Hussars, defeated a large, well-equipped, well-led, and highly experienced force from the German 9th Parachute Division that was holding the small northern Italian town of Medicina. The German unit also had tank and artillery support. In a short, decisive battle lasting a few hours, much of it hand-to-hand, in which tanks blasted holes through the walls of structures through which the Gurkhas advanced, 100 Germans were killed, while the British lost only seven men.⁶⁰

Each of these instances featured unorthodox tactics; aggressive, rapid combined-arms action; and close-quarter fighting in which the allied troops had to guard against civilian casualties. And yet, in each, the attacking side prevailed, at less cost to itself than the defender, and (with

⁵⁶ See Robert R. Leonhard, *Fighting by Minutes: Time and the Art of War*, 2nd ed. (Amazon fulfilment, 2017), 180.

⁵⁷ See, Lutz Unterseher, "Urban Warfare," in, *Brassey's Encyclopedia of Land Forces and Warfare*, ed. Franklin D. Margiotta (London: Brassey's, 2000), 1099.

⁵⁸ Christopher R. Gabel, "Knock 'em All Down: The Reduction of Aachen, October 1944," in, *Block by Block: The Challenges of Urban Operations*, ed. William G. Robertson (Fort Leavenworth, KS: US Army Command and General Staff College Press, 2003), 84–85.

⁵⁹ Ashworth, *War and the City*, 150. Unlike Aachen, where the Americans made decisive use of heavy artillery, the Canadian commander forbade the use of indirect-fire artillery and aerial bombing in order to mitigate collateral damage.

⁶⁰ The battle is ill-remembered outside of the Gurkhas. This account was given to us in the officers' mess of the modern Gurkha Regiment, where a painting by Terence Cuneo depicts it.

the partial exception of Aachen) without massive damage to the civilian infrastructure, let alone the kind of wanton slaughter of noncombatants that was seen in Stalingrad.⁶¹

More recent examples similarly suggest that the assumption of the high demands of manpower in urban operations is exaggerated. In early April 2003, for instance, while pundits were predicting a protracted and bloody siege of Iraq's capital and the Iraqi government spokesman was declaring that there were no American troops in the city, tanks and armored personnel carriers of the 2nd Brigade of the 3rd Infantry Division were conducting "thunder runs," blasting their way down Baghdad's main thoroughfares.⁶² Until this point, it had been widely supposed that armored vehicles could not successfully operate in urban environments. This was largely based on the defeat dealt to Russian mechanized forces in late December 1994 and early January 1995 by Chechen secessionist fighters in Grozny.

The Chechens used "swarms" of loosely coordinated, highly capable small units to ambush Russian columns with rocket-propelled grenades and machine guns in the canyons created by multistory tower blocks lining the city's thoroughfares. Two mechanized brigades were all but destroyed, with at least 200 armored vehicles burnt up and 1,500 Russian troops killed.⁶³ The superiority of the weaponry of the Russian forces was diminished and the mobility of their armor proved to be fragile and contingent. And yet, Baghdad, a much larger and equally dense city, was captured in April 2003 by an armored force comprising around 1,000 men, suffering only a handful of casualties in the process.

Consider also the 1st Brigade Combat Team, which was responsible for the city of Ramadi in Iraq from 2005 to 2006. Ramadi is four times larger than Fallujah, where a year earlier heavy operations by the U.S. Marine Corps consumed far more than the resources of one brigade in two major battles. Nevertheless, the end result was more or less positive: At a cost of 83 American lives, the city was cleared of al-Qaeda in Iraq insurgents, 1,500 of whom were killed. First, insurgents in the city were isolated from external support to the maximum extent possible by checkpoints on major transport routes. Then, neighborhoods were cleared one by one in operations normally starting with the rapid fortification of small combat outposts from which small-unit actions would be conducted. Meanwhile, the pacified areas were gradually handed over to Iraqi police.

The techniques employed in the Ramadi operations were extraordinarily time-consuming — the campaign took nine months. But they had the effect of keeping al-Qaeda in Iraq off balance. 1st Brigade Combat Team was ordered to "Fix Ramadi, but don't do a Fallujah," and that is what it did. This goal was achieved, moreover, without the evacuation, voluntary or otherwise, of the civilian population.⁶⁴ Military force can create the minimum conditions to allow normal civilian life to continue, by killing, capturing, demoralizing, or deterring insurgents⁶⁵ — but the effect is temporary. For it to take hold requires the emergence of good government, administration, and policing. To say that this is difficult would be an understatement, as the last 18 years have shown. It is wrong, however, to place the blame for the confusion one sees in contemporary counter-insurgency theory and practice on the peculiarities of the urban environment.

⁶¹ The solvability of urban combat is a powerful theme in Wahlman, *Storming the City*, passim and 6.

⁶² The definitive account of this is, David Zucchino, *Thunder Run: Three Days in the Battle for Baghdad* (London: Atlantic Books, 2004).

⁶³ Louis A. DiMarco, *Concrete Hell: Urban Warfare from Stalingrad to Iraq* (Oxford: Osprey, 2012), 162.

⁶⁴ DiMarco, *Concrete Hell*, 196.

⁶⁵ William F. Owen, "Killing Your Way to Control," *British Army Review*, no. 151 (Spring 2011), 34–37.

The key problem is not the urban terrain and the extraordinary demand for large numbers of troops that it is supposed to cause. Rather, as we have discussed already, it is about the policy objective: What is the political effect that the military force is supposed to achieve in the city? And is it actually achievable by military force, whatever its size?

When it comes to the numbers and effectiveness of weapons, the most important thing is the tactical aptitude and leadership qualities of the combat forces involved. In this respect, the Russian military of the mid-1990s was staggeringly bad compared to the Chechen irregulars they faced, who were highly motivated, skilled, and well equipped.⁶⁶ In the case of Baghdad in 2003, the roles were reversed: The attacking American marines and soldiers were supremely capable and their boldness paid off against a demoralized, half-routed, and uncoordinated enemy that was decidedly back on its heels. The years that followed showed that, while urban operations are far from easy, the challenges they pose are not insurmountable.

IV. Sweat Saves Blood: Training in the Right Environment

The lessons of Iraq notwithstanding, Krulak is still fundamentally right that warfare is likely to be even more centered on urban environments in the future. Western politicians will continue to have the urge to intervene militarily in other countries for one reason or another, whether good, bad, or imagined. How then to give Western forces the ability to operate confidently in cities, and to innovate and develop new methods that maintain and extend the gap in competence between them and their likely opponents? One part of the answer is prosaic, but nevertheless vital: training.

In January and February 2001, the U.S. Marine Corps Warfighting Laboratory conducted a series of battalion-level urban warfare exercises dubbed “Project Metropolis,” building on earlier experiments in the 1990s that had highlighted alarmingly high casualty rates among friendly forces in such environments. The experiments showed that the high initial rate of casualties experienced by Marine units dropped sharply after they had received hard and realistic training.⁶⁷ The report detailed a number of other technological and tactical improvements, but the gist was that training made the difference. In nearly all of the interviews with British unit commanders conducted for this research, whether at the Infantry Battle School's Urban Warfare Instructor's Course or with the urban warfare group at the Land Warfare Centre, we heard words to this effect: “[A]t first my battalion/company/platoon was alarmingly poor at urban warfare but after training in the *right* environment I was much more confident.”⁶⁸

It is not that new training methods or new techniques are needed per se, because the old methods and techniques are still important. It is rather that training in the relevant methods requires the correct environment. It is the training environment that allows commanders to simulate the

⁶⁶ See, Anatol Lieven, *Chechnya: Tombstone of Russian Power* (New Haven, CT: Yale University Press, 1998), esp. chap. 8.

⁶⁷ *Project Metropolis: Military Operations in Urbanized Terrain, Battalion Level Experiments, Experiment After Action Report*, Marine Corps Warfighting Laboratory, May 7, 2001. Project Metropolis has recently been restarted. See, Todd South, “How This Urban Warfighting Experiment Could Transform How Marines Fight in Cities,” *Marine Times*, Jan. 7, 2019.

⁶⁸ American colleagues, including Col. Douglas Winter, chair of the Department of Military Strategy, Planning, and Operations U.S. Army War College at the Changing Character of Warfare conference, Oxford University, June 27, 2019, and Maj. (ret.) John Spencer, chair of Urban Warfare Studies at the Modern War Institute, West Point at War in the Global City conference, Warwick University, Dec. 11, 2018, echoed the same things our British interlocutors told us.

scale and complexity of the challenges troops will face in an urban battle. How the actual training is done depends on the commander organizing it. British commanders, for instance, are encouraged to brainstorm down to the junior noncommissioned officer level, then run their units through an exercise. After that, the operative scenario is changed slightly to ensure that soldiers are not “learning the range” but instead are learning to understand and solve the dynamic underlying problems. Then the exercise is run again. Finally, the exercise is run once more without leaders present, to ensure that the unit as a whole has absorbed the relevant lessons and is able to act accordingly in an organic manner. Far less ideal is when lessons are conducted straight out of a pamphlet (i.e., in accordance with a checklist and a generic scenario authored by someone other than the commander). How these exercises are run is also contingent on factors relating to the particular scenario at hand — which is dependent, in turn, on ever-shifting complexities of the real world — and the character and capabilities of the units involved. But regardless, having the right environment in which to train is the most important factor.

As for what is the “right” environment, based on our interviews it comes down to three factors: authenticity, scale, and recoverability of lessons. Does the training area look — and ideally feel, sound, and smell — like the real thing? Is it sophisticated enough to accurately simulate the effects of various weapons? What feedback is being given to the soldier who is “hit”? Does he or she experience minor pain or an inconvenience or simply a loss of pride from being defeated? The instant and often uncomfortable result of using modified personal service weapons firing paint pellets accurate up to at least 100 feet sharpens the mind. Increasing the variety and range of the weapons being simulated or using a different feedback method would likely pay huge dividends. Can exercises be recorded and played back (as, for example, one might see in some video games), so that all commanders can learn from mistakes and successes, their own as well as others? Is the environment big enough for large units to practice macro-level combined arms and support functions simultaneously, not just micro-individual or small-unit battle drills?

Urban Warfare Training: International Comparison

Few countries possess facilities approaching the ideal standards. Although it has a large number of small sites for practicing close-quarter battle, the United States currently has no facility for training large units in realistic urban environments.⁶⁹ Likewise, Britain’s urban training areas are generally considered inadequate by its users — too small and too much like a central European village, the sort of urban environment the army envisaged it would need to fight in when they were built in the 1980s. There is a mock Afghan village in the Stanford Training Area in Norfolk, U.K., run by the Operational Training Advisory Group, which is an up-to-date and generally convincing portrayal of operating conditions in Helmand province. But it does not pretend to approximate the conditions of a city.⁷⁰

France has very good facilities at CENZUB in Sissonne, which features a large number of well-designed buildings of various types, and a standing opposition force able to perform a variety of “enemy force” roles: regular, irregular, and hybrid. A U.S. Marine Corps senior noncommissioned officer who visited the facility in the summer of 2017 was particularly

⁶⁹ John Spencer, “The Army Needs an Urban Warfare School and It Needs it Soon,” *Modern War Institute*, April 5, 2017, <https://mwi.usma.edu/army-needs-urban-warfare-school-needs-soon/>. Some of our interlocutors advised that a new facility has been approved in the United States that is large and, by international standards, lavishly well funded (reputedly at \$6-9 billion). The key feature of this facility is meant to be its relatively large and impressively realistic civilian population. However, as far as we have been able to determine thus far, there has been no official announcement of this nor have we seen any written documentation of it.

⁷⁰ See, “Troops Train in the Middle East of England,” U.K. Ministry of Defence, Jan. 18, 2011, <https://www.gov.uk/government/news/troops-train-in-the-middle-east-of-england>.

impressed by the relative degree of seriousness with which the French treated urban training, remarking,

A significant aspect of this quality training is that the OpFor [Opposition Force] is staffed with quality soldiers who plan and fight with the will to win. I observed the OpFor actually “winning the battle” on several occasions. In a sense, this training has an element of “free play” in that while scripted in a way, the CENZUB staff creates conditions for free thinking on both sides.⁷¹

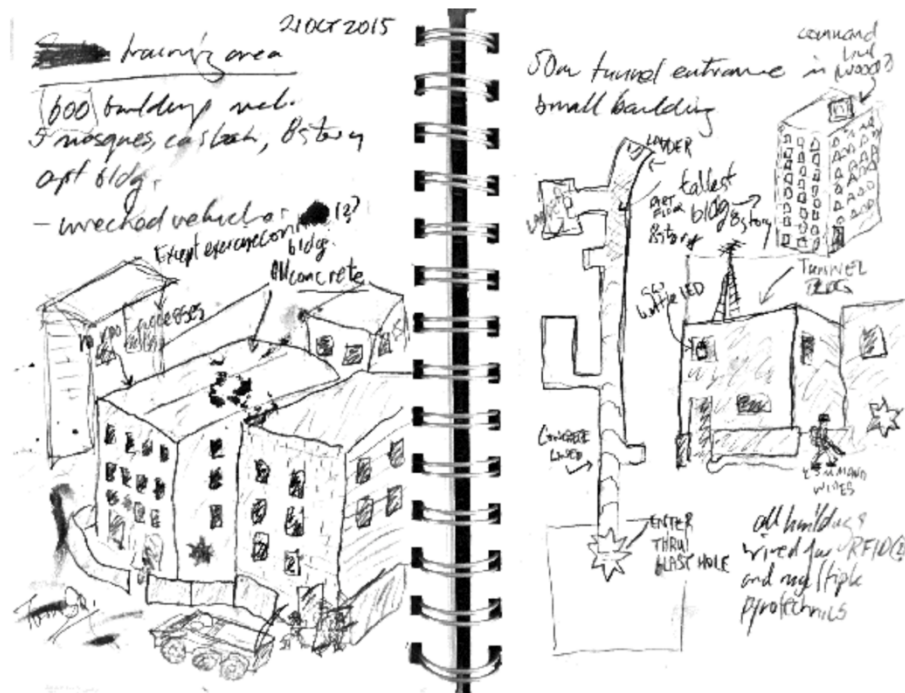
Britain has a degree of access to CENZUB in accordance with the 2010 Lancaster House Treaty on defense and security cooperation between the two countries, which could offset the relatively low quality of its own facilities. Certainly, the British soldiers and commanders with whom we have spoken who have trained there are very positive about the experience. However, when defense budgets are under pressure, savings are often found by cutting travel alongside other activities. CENZUB is only useful if you can get there.

The best existing urban warfare training facility is in Israel’s Negev desert on the Tze’elim army base. Nicknamed “Baladia,” the Arabic word for “city,” the training area was built in 2005 in part by the U.S. Army Corps of Engineers at a cost of \$45 million. It consists of around 600 different buildings, including five mosques, a casbah, a clinic, a town hall, and an eight-story apartment building. The environment provides a highly realistic simulation of a Middle Eastern town, right down to a sound and pyrotechnic system able to recreate the ambient noises of normal civilian life (e.g., calls to prayer, music, road noise) as well as very convincing indirect fire attacks and IED blasts. The whole facility is controlled through a central monitoring station that can track and record all elements of large units through exercises for after-action review.⁷²

As a testament to the authenticity of Baladia, while one of us was writing up notes in a Tel Aviv bar after a visit to the facility, the bartender, an Israeli Defense Force reservist, recognized the crude sketch of the facility seen below and remarked that he had spent many weeks in training there. In his words, after a few days on exercise there it was hard sometimes to tell the difference between Baladia and actual operations in Gaza, where he had seen combat as a sharpshooter.

⁷¹ Taken from an unclassified and unpublished trip report provided us by one of our Marine Corps interlocutors, June 27, 2017.

⁷² See, “Preparing for More Urban Warfare,” *Economist*, Jan. 25, 2018.



“Baladia” camp, Tze’elim Israeli Defense Forces training area, Oct. 21, 2015. (Image courtesy of the authors)

Germany is nearing completion of an urban warfare training area at Schnöggersburg in Saxony-Anhalt, which will rival Baladia in scale and sophistication. It includes a range of building types set in neighborhoods including an “old town,” a shanty town, a light industrial area, a railway station, and an airport.⁷³ However, the key innovation of this facility is the “Legatus” simulation system developed by the weapons and engineering company Rheinmetall AG. In addition to recording exercises as described above, it can purportedly accurately model the effect of weapons fired externally on targets inside buildings or otherwise obscured by cover.⁷⁴ If true, this would represent a major advancement over existing optical laser-based training systems, which work well in relatively open terrain, where there is limited cover, but fail in cluttered urban environments where cover is plentiful and varies in ballistic resistance.

Although most Russian bases, like American and British ones, usually include just a few buildings, occasionally ruins, in which small units practice urban combat drills, Russia is investing substantially in new facilities.⁷⁵ At the Mulino base near Nizhny Novgorod, for instance, the new 333rd Combat Training Center operates a range of sophisticated training simulators and a “battle town,” which is said to be large enough to accommodate a full battalion on exercise.⁷⁶ Additionally, the Chechen provincial government operates on behalf of the

⁷³ The base can be seen in this report by Gunnar Breske: ‘Häuserkampf in Schnöggersburg-Bundeswehr baut Geisterstadt,’ *Tagesthemen*, ARD television, Oct. 2, 2015, in German but with English subtitles, <https://www.youtube.com/watch?v=sDzUWFrbmMI>.

⁷⁴ “Rheinmetall Presented Its Latest Legatus Live Urban Operations Training Systems at Eurosatory 2018,” *Army Recognition*, June 22, 2018, http://armyrecognition.com/eurosatory_2018_official_news_online/rheinmetall_presented_its_latest_legatus_live_urban_operations_training_systems_at_eurosatory_2018.html

⁷⁵ Interview with former senior Russian Ministry of Defence official, Moscow, Oct. 6, 2017.

⁷⁶ J. Hawk, Daniel Deiss, and Edwin Watson, “Russia Defense Report: Fighting the Next War,” *South Front*, March 19, 2016, <https://southfront.org/russia-defense-report-fighting-the-next-war/>. Interestingly, the simulation system at Mulino was originally supposed to be provided by

federal Russian army an impressively large and thoughtfully planned facility that is nearly 400 hectares in size and includes a range of building sizes. Like CENZUB, it features a permanent cadre of trainers with extensive practical experience with urban combat. However, the facility is reserved for Spetznaz units (Russian Special Operations Forces) exclusively and is almost entirely focused on counter-terrorism operations, thus its benefits are not available to Russian general-purpose forces.⁷⁷

Lessons Learned and not Learned in Urban Warfare Training

Whatever the environment, soldiers must be taught to outthink the adversary, to get inside the enemy's decision-action cycle using violence and tempo and then stay there, because keeping the enemy on its heels, reeling backward and struggling just to survive, is universally recognized as key to a successful operation. "The battle always goes to the quickest," was how the famous German general, Erwin Rommel, once put it.⁷⁸ Yet, whereas most Western armies have plenty of big spaces with varied natural terrain in which to experiment and practice how to do these things, the same is not true with regard to urban environments. Despite the fact that most of the soldiers that make up modern armies themselves live in cities, command and training establishments treat city fighting distinctly differently — they are more risk-averse and less bold, more rule-bound and less imaginative, and ultimately less able to innovate.

British soldiers, for example, are told from the moment training begins that they are part of the most professional fighting force in history, that they are the best equipped, best trained, and best supported soldiers in the world, and that they need not fear anyone, or any environment. This message changes, however, during the few days of urban warfare training they are allocated as part of their six-month Combat Infantryman's Course.⁷⁹ Soldiers are told that in other environments the use of initiative is not only tolerated but positively encouraged. However, in the urban environment, they are discouraged from aggressively pursuing an enemy who is almost certainly less well trained and equipped. The soldier is taught to fear the threats of a fast tempo — isolation, outflanking, a reduction in the fire support that can be brought to bear — but not taught to embrace these things as opportunities that can work in his or her favor.

An example from the American forces also illustrates this curiously hidebound attitude. It is widely agreed that one of the most effective pieces of equipment in the arsenal of the urban counter-insurgency in Iraq was the collection of concrete barriers of varying sizes, called "T-walls" on account of their cross-sectional appearance.⁸⁰ Most famously, T-walls were a key element of the 2008 Battle of Sadr City, a large Shiite suburb of Baghdad, where they were used effectively to enable friendly force maneuver. Isolating operational areas with rapidly deployable walls deprived the insurgents of mobility, concealment, support, and initiative. As a RAND study of the battle concluded, "Concrete enlisted time on the side of the counterinsurgent," which is quite a remarkable accomplishment.⁸¹ For all its success, though, the method of deploying the barriers was extremely ad hoc, relying on civilian top-hooking cranes hired by the day, which needed to be unhooked from the blocks by hand by a military

Rheinmetall, presumably a variant of the Legatus system, under a €100 million contract from which the Germans withdrew after the imposition of sanctions in 2014.

⁷⁷ Interview with former senior Russian Ministry of Defence official, Moscow, Oct. 6, 2017.

⁷⁸ Field Marshal Erwin Rommel, *Rommel and His Art of War*, ed. John Pimlott (London: Wrens Park, 2003), 133.

⁷⁹ It is perhaps instructive that a British infantry soldier under training spends more time on the drill square learning to march than learning the core skill of fighting in an urban environment.

⁸⁰ As convincingly recounted in, Bing West, *The Strongest Tribe: War, Politics, and the Endgame in Iraq* (New York: Random House, 2008), 330.

⁸¹ David E. Johnson, M. Wade Markel, and Brian Shannon, *The 2008 Battle of Sadr City: Reimagining Urban Combat* (Santa Monica, CA: RAND, 2013), 108, https://www.rand.org/pubs/research_reports/RR160.html.

engineer who was exposed to fire in the process.⁸² Eleven years later, it is still ad hoc: There have been no changes to any systems or equipment sets, such as the number of cranes assigned to engineer or maneuver units. There is no doctrine for emplacing concrete barriers or for the consideration of logistic packages that include concrete walls. And the technique for their emplacement is *not practiced* in training centers.⁸³ Why not change in response to what seems to be a significant lesson of modern warfare?⁸⁴

One area where the training of soldiers is being adjusted for the urban environment is physical conditioning. Both the American and British armed forces, among others, have shifted the emphasis of physical training away from the high endurance forced march toward developing all around stronger soldiers who are trained in the sort of repeated anaerobic bursts of activity typically required in urban operations, like hauling themselves, their equipment, and perhaps wounded comrades, over walls and through windows.⁸⁵ Still, more could be done. To prepare a soldier for urban warfare, he or she also needs to conceive of moving through the city quite differently than most civilians — to think like an urban explorer, the sort of person who is as happy moving through service tunnels and across rooftops as on sidewalks and roads.⁸⁶ Armed forces have long recruited directly, or otherwise sought as trainers or guides, the likes of poachers and backwoodsmen for their specialist fieldcraft skills. Why should the urban environment be any different?⁸⁷

Urban warfare is not intrinsically more difficult than other forms of warfare. It creates certain challenges but at the same time creates opportunities. The ability to overcome the former and exploit the latter rests ultimately on the quality of training. To return to Rommel, whom we quoted earlier, the kind of quick and fluid action that he sought in his troops begins long before the fight:

⁸² For an illustration see the photos in Johnson, Markel, and Shannon, *The 2008 Battle of Sadr City*, 75–76.

⁸³ Correspondence with Maj. (ret.) John Spencer, chair of Urban Warfare Studies at the Modern War Institute, Nov. 16, 2017. Spencer was a company commander in the Sadr City battle and also served in Iraq in 2015–16 as an adviser on barrier systems.

⁸⁴ We were unable to obtain from our interviewees a consistent or plausible answer to this question. It was supposed by several, including Spencer (see note 85), that perhaps the army did not think it would have to do it again, which runs contrary to the stated assumption that urban warfare is going to be more common and is therefore perplexing.

⁸⁵ Sean Kimmons, “Army Combat Fitness Test to Become New PT Test of Record in Late 2020,” *Army News Service*, July 9, 2018, https://www.army.mil/article/208189/army_combat_fitness_test_set_to_become_new_pt_test_of_record_in_late_2020.

⁸⁶ For insight into the philosophy and techniques of “place hacking,” a good place to start is, Bradley L. Garrett, *Explore Everything: Place-Hacking the City* (London: Verso, 2013). For this research, we interviewed a place-hacker in October 2017 who illustrated for us, with photos as an example, a typical hack of our own university — an adventure that encompassed crawling through generally unknown (and publicly inaccessible) service tunnels, climbing decorative surface features of structures, and traversing the rooftops of several central London landmarks over a space of three city blocks. Another worthwhile text for opportunistically reshaping the way cities are envisioned is, Geoff Manaugh, *A Burglar’s Guide to the City* (New York: Farrakhan, Strauss, and Giroux, 2016).

⁸⁷ Our interlocutors at the British Army Infantry Battle School’s Urban Warfare Instructor’s Course half-joked that a good number of private soldiers brought to the table extensive burglary and other relevant skills from their civilian lives. The special forces and intelligence agencies sometimes actively seek out such recruits for specialist work, notably surveillance. However, except for a few one-off and ad hoc consultations with waterworks and sewage utilities, we came across no systematic engagement by regular forces with a range of urban specialists, whether licit or (as we would suggest that they also do) semi-licit or illicit ones.

The commander must always strive to make his troops aware of the latest in tactical theory and developments, with a view to learning and applying the practical experience on the battlefield. ... The best care of troops is founded in good training, as this reduces casualties.⁸⁸

What is required to realize this is twofold: first, training facilities that are big enough for large combined-arms units with supporting logistic, medical, and intelligence elements, and realistic enough to approximate real-world battle conditions; and second, a mindset among those training soldiers in urban warfare that tells soldiers they can adapt to and thrive in this environment as well as in any other.

V. Tempo, Pressure, Pursuit: The Strongest Gang

Western armies have a longstanding habit of seeking solutions to tactical and strategic problems in technology because this plays to the strengths of Western countries. In a March 2017 NATO urban warfare game, for instance, the teams played with 39 different hypothetical and actual technologies. These included: various enhancements to C2ISR (command, control, intelligence, surveillance, and reconnaissance), improving the ability of friendly forces to see and understand the operational environment in real time in complex detail; a range of autonomous weapons and logistics systems to reduce the exposure of soldiers to the highest risks; several measures to improve mobility and force protection; and some concepts for helping commanders to better influence the information environment.⁸⁹ Many, if not all, of these technologies and ideas could prove useful and will soon be or are already available.

More important than changes in technology, however, are changes in how urban operations are conducted generally, something with which the British and American armies are already experimenting. We will deal with these first before looking further at developments in C2ISR and logistics. Combined arms operations, including the use of armor, are likely to continue to have a significant role in any future major urban conflict. We would not seek to suggest that light forces can, or indeed should, be the sole answer to the problem. As ever, force packages should be configured to deal with the threat presented by the enemy. However, regular force tactics must evolve. In a world containing urban clusters of up to 150 million people, saturating a city with soldiers cannot be the answer — as was prescribed by old field manuals and doctrine.⁹⁰ The numbers simply will not add up.

What is needed is a substantial shift in thinking from extant, industrial-era, positive-control-oriented approaches, to one in which the regular force is simply the strongest gang in a given area. The key to fighting in the morass of the urban environment is not necessarily using divisional-level maneuvering to shatter an enemy general's plan, but successfully overwhelming the adversary's cognitive abilities at the team and individual level — all in an effort to achieve a given policy aim. The army fighting in this context should seek to create a thousand small outflanking maneuvers together to generate the conditions to destroy their enemy's ability to put together a response.

Beyond being an efficient method of killing the enemy, this approach could allow the attacking force to gain geographically distinct, localized control in a short timeframe. This would, of course, require enough soldiers to achieve multiple, simultaneous actions and in so doing create a situation complex enough to overwhelm the enemy's ability to comprehend it. But it would

⁸⁸ Quote from, Rommel, *Rommel and His Art of War*, 133–34.

⁸⁹ Urbanisation Seminar Game, NATO Defence College, Rome, Sept. 28–Oct. 7, 2017.

⁹⁰ “China Is Trying to Turn Itself Into a Country of 19 Super-Regions,” *Economist*, June 23, 2018, <https://www.economist.com/china/2018/06/23/china-is-trying-to-turn-itself-into-a-country-of-19-super-regions?frsc=dg%7Ce>.

also require commanders at all levels to have the courage to allow their subordinates to seize opportunities as they are created.

To make the best use of the advantages regular soldiers have over their irregular and less well-trained adversaries, conventional military thinking must be turned on its head. At an individual level, regular soldiers are more lethal than their irregular adversaries, are in better physical condition, shoot straighter, and are from a military culture that (in theory) regards initiative as a key criterion for professional advancement. Put simply, Western soldiers have numerous advantages over the enemy. To focus only on their disadvantages is ceding the psychological high ground before the first shot has been fired.

Currently, Western soldiers are likely to be part of a force that is loath to let them use those advantages because the politicians that control that force are often uncertain as to the value of the prize, which makes them risk-averse. It has long been a truism of military history, as observed earlier, that no amount of tactical acumen can make up for defective strategy. But now it is worse than that even — bad policy actively drives bad tactics, while making strategy largely irrelevant. Even the best fighting force in the world, if it is deployed statically and is permanently restrained from being proactive, is still eminently vulnerable to a fanatic in a bomb vest, with all the strategic impacts that that entails. It is ironic that in the pursuit of the laudable goal of limiting risk, specifically casualties to their own forces and to noncombatants, governments dictate strategies and prescribe tactics that, in practice, increase the risk and likely predetermine failure.⁹¹

At the command level, the “maneuvrism approach” is the first tenet of the British Army’s philosophy for operations and a frequent reference point for allied armies.⁹² Applying this philosophy in the urban environment demands that commanders fight the urge to control in real time. Control measures are essential, but they need to be simple, robust, and as unrestrictive as possible. The fragmenting tendencies of the city require everyone to be comfortable operating in the pursuit of a well-articulated goal while not requiring minute-by-minute direction. Perhaps being the strongest gang is most similar to how naval doctrine conceives of sea control — interventions that are limited in time and scale of ambition and are characterized by a high degree of ruthless, independent action.

The current doctrine of strict control measures and positive control is no longer entirely fit for purpose, fixed as it is in the ground-holding concepts of land warfare. The underpinning logic of this doctrine is twofold. First, it is generally still supposed that urban battles involve the use of massed artillery to buy the time and space to maneuver and cause the maximum possible destruction of the enemy’s combat power before any attempt is made to engage in direct combat. Second, the lack of visibility and the fluidity of the battle make it very difficult to discern friend from foe. In an effort to avoid friendly fire and civilian casualties, therefore, commanders are wont to impose positive control upon their subordinates, requiring them to seek authorization for firing their weapons or moving.

However, these concerns should be of decreasing importance. Western armed forces are unlikely to employ overwhelming firepower in a congested battlespace where there are so many noncombatants, because a) in most conceivable contingencies it would exceed the limits of political acceptability, and b) in most instances there are viable, or better, alternatives. Notably,

⁹¹ Clausewitz was not the first to repeat this sentiment, but his formulation of it is especially adroitly put, “the mistakes that come from kindness are the very worst.” See, Clausewitz, *On War*, 84. This category of mistake, however, is by far the most common in contemporary Western strategy. On which point also see, Betz and Stanford-Tuck, “Teaching Your Enemy to Win.”

⁹² Army Doctrine Publication, *Operations*. Development, Concepts and Doctrine Centre (UK Ministry of Defence. 2015), 5-2.

technological advances in the form of precision-fire weapons supported by unmanned aerial vehicles reduce the requirement for conventional artillery, even if they do not replace them altogether.

It is helpful to reflect on the remarks made half a century ago by the Brazilian Marxist revolutionary Carlos Marighella, who wrote what was essentially a gangster warfighting manual dressed up with ideological claptrap:

The urban guerrilla must possess initiative, mobility, and flexibility, as well as versatility and a command of any situation. Initiative especially is an indispensable quality. It is not always possible to foresee everything, and the urban guerrilla cannot let himself become confused, or wait for instructions. His duty is to act, to find adequate solutions for each problem he faces, and to retreat. It is better to err acting than to do nothing for fear of making a mistake.⁹³

The truth of the matter is that this perfectly sensible tactical advice to the urban guerrilla is just as pertinent now to the regular Western soldier. Marighella and his followers and admirers were never so numerous or powerful as to be able to physically dominate the entirety of the cities in which they chose to operate. Neither is any Western army up to such a task without an extraordinary concentration of effort that is politically implausible and therefore strategically tenuous.

The Technological Contribution: C2ISR and Logistics

Before moving to our conclusion it is worth dwelling briefly on the existing and likely impacts of technology on urban warfare, starting with C2ISR, as it is both an expansive and elusive subject, and its effects on the battlefield are pervasive and indirect. In general, though, a main point we wish to stress is that technology should be an enabler of strongest gang theory — allowing dispersed operations of the sort idealised above; but in practice it is too often an impediment when it is employed to reinforce a top-down, positive control-oriented command model that squelches small unit initiative. , whereas in practice right now it is something of an impediment. Technology is important but it can be the problem too when you let it drive the cart, as it were. Equally, as we have stressed in other respects, it can be a neutral factor that affects all belligerents for better or worse.

For example, some ways, technological developments in this field have seriously benefited irregular forces. For example, in addition to their extensive use of IEDs while fighting the Iraqi Army, Islamic State forces also employed vehicle-borne IEDs (VBIEDs) as a precision weapon, including armored variants. These were used in combination with other weapons. What allowed them to operate in this manner was the group's relatively sophisticated C2ISR system, which included modified, off-the-shelf drones. With the aerial perspective afforded to them by such devices, Islamic State commanders were able to control and direct multiple VBIED attacks over a large area, including on moving columns or columns that had briefly halted.

In response, Iraqi units were forced to construct ditches and other barriers around themselves and throughout the city to slow and control the threat.⁹⁴ Ultimately, all major road movements would be accompanied by a bulldozer on a flatbed truck. When forced to halt, instead of simply setting out pickets and heavy weapons pointed in the direction of potential attack, the bulldozer

⁹³ Carlos Marighella, *Minimanual of the Urban Guerrilla* (1969), 4.

⁹⁴ *What the Battle for Mosul Teaches the Force*, Mosul Study Group, no. 17-24 U, U.S. Army, September 2017, 36, <https://www.armyupress.army.mil/Portals/7/Primer-on-Urban-Operation/Documents/Mosul-Public-Release1.pdf>.

would be used to dig a ditch and berm enclosure, thus providing a good measure of defense against truck and car bombs.⁹⁵

There are many advantages to operating in such a manner, including fewer civilian casualties, as potentially jittery soldiers are less likely to open fire on unidentified vehicles approaching their perimeter. The disadvantages, though, are significant: For one thing, it cannot work without wrecking whatever civilian infrastructure is present, such as sewers, water mains, utility cables, and road surfaces. Conducting such an operation in an urban setting, when garnering and maintaining the good will of the local population is a main objective, is very challenging.

Some potential solutions are already emerging in military engineering conferences and in the marketing brochures of firms selling defensive barriers and counter-mobility systems, the latter very often focused on changes to urban infrastructure for domestic counter-terrorism purposes.⁹⁶ One of these firms, Kenno, a Finnish manufacturer of laser-welded, steel-sandwich components, has, with the Finnish army, developed what is essentially a surface-mounted, reusable, modular fortress that can be assembled without specialist tools by a small team in a few hours.⁹⁷

What the above illustrates is that changes in civilian technologies — including robotics and microelectronics, miniaturization of batteries, and communications — enabled a nonstate actor, the Islamic State, to acquire one of the primary advantages of airpower (i.e., aerial reconnaissance) at a fraction of the cost of an air force. This, in turn, has caused the regular forces operating against the group to reinvent technologies and tactics that would have been recognizable to a Roman legionary constructing a marching fort in hostile territory at the end of a day's march.

It has also required regular forces to develop their own new techniques for utilizing new technologies, allowing them to operate in smaller teams in a more dispersed manner. For instance, at a recent conference of urban warfare specialists in New York, a senior officer highlighted the need to constantly develop new techniques while recounting an observation made to him by a young Australian special forces officer working with Iraqi forces in the fight against the Islamic State in 2017: “The most effective weapon on the current battlefield is a joint and inter-agency-enabled combined arms team with an armed ISR platform (i.e., a ‘drone’) flying above.”⁹⁸

Similarly, in a workshop on conflict in urban environments which we attended in Britain, a London-based company showcased a civilian technology that it had developed for creating precise 3D-renderings of urban infrastructure using laser-scanning, which allowed them to be experienced in virtual reality. The military applications of this for planning, simulation, and training are significant, if it can be made robust enough for the field, and if the scanning devices

⁹⁵ Interview by author with a British Army officer who was part of an advisory team in Iraq during Mosul operations, Brecon, Wales, March 2018.

⁹⁶ These are discussed in greater detail in, David Betz, “World of Warcraft: The Contemporary Resurgence of Fortification Strategies,” *Infinity Journal* 6, no. 1 (Winter 2018): 18–22.

⁹⁷ Technical data and a video of the Balpro system may be seen on the company's website: “Force Protection Balpro Protector – Fast Fortification System,” Kenno, <http://www.kenno-shield.com/balpro/force-protection-balpro-products/>.

⁹⁸ Maj. Gen. Rick Burr, “Future War in Cities: Australian Thoughts,” Multi-Domain Battle in Megacities Conference, Fort Hamilton, NY, April 3–4, 2018, https://www.youtube.com/watch?v=1ahlogq_mHw&list=PLx2Zn7hPXT7d1zDzuqt00NOsI4ZzyTXUu&index=6.

are light enough to be deployed on an unmanned aerial vehicle. The first question the senior officer in the room asked was how close to real time these simulations could be delivered.⁹⁹

The apprehensions that animated both senior officers noted above are consistent with those that pertain in any environment. Commanders want to have intimate knowledge of the terrain, including where their own forces are or will be, where their enemy is and may be going, and what their intentions are (such as they can be gleaned). Additionally, they want this information in a form that they can, quite literally, walk through with their subordinate commanders during the planning phase of an operation — and for all of this to happen more swiftly and accurately than for the opponent. Peniakoff would have asked for the same thing, as would have Wellington, or Marlborough, or any of the great captains of history all the way back to Alexander the Great. Developments in C2ISR seem to be making that more possible in the city than previously thought.

Clearly, when forces are operating in relatively small numbers in a dispersed manner in a city in upheaval, there will be concerns about the security of supply chains. Technology may have some useful answers here also, which are worth discussing in a bit more detail. Consider, for instance, that NASA and the U.S. Federal Aviation Administration have recently initiated the Urban Air Mobility Grand Challenges, modeled partly on the DARPA Grand Challenges that began experimenting with autonomous ground vehicles more than a decade ago. The main thrust of this effort is to alleviate a civilian problem, specifically the traffic jams that plague life and commerce in big cities, through the development of a new class of air vehicles that will bypass congestion by flying over it. “I happen to believe that this is a revolution coming in aviation,” were the words of one of the NASA officials involved — a revolution that has significant military impact too.¹⁰⁰

If the head of the U.S. Federal Aviation Administration’s Unmanned Aircraft Systems Integration Office can say that he is looking forward to the age of autonomous air taxis and Domino’s is already experimenting with the aerial drone delivery of pizzas fresh from its ovens to its customers’ backyards, then it stands to reason that urban military logistics, from resupply through medical evacuation, are likewise set for a shake-up.¹⁰¹ Urban air mobility may have started with a civilian preoccupation with the frustrations of commuting and the perceived need for just-in-time delivery of everything from machine parts to snacks, but its potential military applications are significant.

Accepting Risk, Avoiding Self-Defeat

The essential point here is that many of the perceived problems of urban warfare are, in fact, self-imposed. They emerge from a constraint on the way military force is used together with the growing capability for real-time, friendly-force tracking, which reduces the risk of soldiers accidentally attacking their own side. Yet, constraining soldiers too tightly also reduces their ability to maximize their chances of victory against a determined enemy. The solution is to ruthlessly and efficiently apply the maneuverist approach at the tactical level. Senior commanders must become comfortable with formulating a plan and then trusting in the skill of their most junior subordinates to see that plan succeed. Commanders at all levels must see the

⁹⁹ Urban Warfare Study Day at British Army, Land Warfare Centre, Warminster, July 10, 2018.

¹⁰⁰ Alan Boyle, “NASA and FAA Cast a Wide Net to Get Set for Revolution in Urban Air Mobility,” *GeekWire*, Nov. 2, 2018, <https://www.geekwire.com/2018/nasa-faa-cast-wide-net-get-ready-revolution-urban-air-mobility/>.

¹⁰¹ David Reid, “Domino’s Delivers World’s First Ever Pizza by Drone,” *CNBC*, Nov. 16, 2016.

urban battlefield as a series of disparate and lightly connected nodes of activity.¹⁰² The apogee of this approach would be for small groups of soldiers, whose activities are lightly coordinated and de-conflicted, to exert pressure upon the adversary in multiple places at the same time. Each small team would be given the freedoms and the resources to allow it to overwhelm the adversary through superior skill, tactics, and equipment.

The reticence on the part of Western armies to accept an approach that is distinctly less oriented toward positive control, where local commanders are freer to maneuver more boldly and aggressively, accepting a higher degree of political risk, is based on admirable concerns. Senior commanders are uncomfortable with what could be seen as abandoning the individual soldier to a fight that pits him against his adversary. In this approach, the commander would have to effectively wash his hands of the ability to affect the outcome once the soldier has made contact with the enemy. Its potential benefits, however, are numerous.

For starters, it produces less actual — as opposed to perceived — risk to the soldier because a fractured and retreating enemy is less able to coordinate resistance than one that is continually given time and space in which to reorganize and to evolve new tactics.¹⁰³ It also reduces the demand for indirect (i.e., non-precision) fire. It is a methodology that maximizes the strengths of a well-trained and equipped force and minimizes the time spent fighting in places where people actually live in dense concentrations. While the “strongest gang” approach does render an attacking force vulnerable to counter-tactics from the enemy, this will only be an issue if that force is not very effective. The assumption that this would be the case is a disappointing and self-defeating foundation from which to make military decisions and shows a disturbing lack of trust down the chain of command. Applying multiple points of pressure to the enemy would allow a force to achieve the mission while affording the commander the opportunity to judge where and how to commit resources to exploit success. There is little here that should offend or frighten modern commanders. Boldness, simultaneity, coordinated action, and the like are principles of combat that have long been taught and applauded in every other tactical environment. Why not the city?

Conclusion

The urban environment is a challenging setting in which to fight — as are all environments. Undoubtedly, the key constraint is the potential intermingling of civilians and civilian infrastructure with combat operations. Yet, civilians may be evacuated, limiting their exposure to harm, and it is sometimes possible to fight in a way that mitigates collateral damage, even when civilians are present throughout the battle. Unequivocally, significant political consequences may follow from a soldier pulling the trigger. But history and the experience of recent urban operations show that soldiers and commanders — properly trained and equipped — can act judiciously and achieve the goals of their mission despite the odds seeming to be against them.

Military operations invariably have an impact on the urban landscape — even small arms can be devastating to structures — and there is no straightforward, correct answer to whether and to what extent it is acceptable to damage a city in pursuit of a political objective. It depends on many factors — military necessity and justness of cause, in particular — and the answer may vary even within the same conflict. Take for example operations in northwest Europe against Germany during World War II. Allied generals faced very different political strictures on tactics at the end of the campaign than they did at the beginning.

¹⁰² A related thought suggests it be treated as an organism. See, John Spencer and John Amble, “A Better Approach to Urban Operations: Treat Cities Like Human Bodies,” Modern War Institute, Sept. 13, 2017, <https://mwi.usma.edu/better-approach-urban-operations-treat-cities-like-human-bodies/>.

¹⁰³ On which point, see, Betz and Stanford-Tuck, “Teaching Your Enemy to Win,” 16–22.

Critics exaggerate the impact on the city when they speak of combat operations “killing the city” and of “urbicide,” purportedly a renascent war strategy that targets the “destruction of buildings *qua* representatives of urbanity.”¹⁰⁴ In reality, there are no major cities that have been destroyed by war. Groningen and Aachen — and even Berlin, Stalingrad, Hiroshima, and Carthage for that matter — were all back in business soon after being blasted to smithereens in warfighting that verged on the exterminatory. Sometimes, nature may destroy a city, but man, despite his best efforts, does not.¹⁰⁵

Technological change is a constant that touches upon every aspect of urban warfare. Weapons are more powerful as time passes and communications are more rapid and dense. Overall, there has been an acceleration of the transnational flow of people, ideas, and things across the global political economy that seems, at first glance, to be a major complicating factor in politics and warfare. There has also been a change of scale: Cities are simply bigger by an order of magnitude than they were in the past because there are vastly more people in the world and fewer of them are needed to work in agriculture. At the end of the day, however, these are changes in form rather than substance. The challenges faced by the British Army in Basra in 2005 were not all that different from those that it faced in Buenos Aires 200 years earlier.

The reason the words “urban guerilla” cannot yet be replaced with “British soldier” in Marighella’s quote is the misalignment of policy with strategic realities and tactical common sense. The problem of the urban terrain is both political and tactical. However, it is beyond our remit and ken to solve the problem of a highly risk-averse political context, as we described it earlier. Western politicians probably ought not to pick fights in the world’s sprawling, ungoverned conurbations against little-understood enemies preying on collapsing civil societies. The best thing is not to fight at all, anywhere — as Sun Tzu quite rightly said.

Nevertheless, there are a wide range of very plausible limited contingencies — strategic raids on certain facilities and noncombatant evacuation operations spring most readily to mind — that will propel armed forces into urban environments to one degree or another. It is possible to make some progress on the tactical side that will improve the chances of such actions being successful — namely, doing what is known to work, but doing it better and more consistently. For that to occur, however, Western armies must first stop deploying and re-deploying the same hoary old scare stories about what seems likely to be the normal operating environment for the foreseeable future. Tactics can be adjusted and training improved to master the neutrality of the environment.

Military and strategic thought is most compelling and practically useful when it is empiric, pragmatic, and phlegmatic. Commanders will never be totally right in their decisions. They ought, though, to try to be “right enough” — to be able to determine the big picture goals, such that they are decisive and incisive enough to be turned into clear orders. And they must have the moral courage to let subordinate commanders get on with the task unburdened by micromanagement or bullying. Methodologies of strict cause and effect in complex problems of warfare, urban or otherwise, ought to be distrusted. Too often they are flawed by bad history — “just-so stories” that are based on habit and legend dressed up as authoritative models.¹⁰⁶

Moreover, the combination of Moore’s Law with the ubiquity of technology and its ever-decreasing cost ought to remind us that the context of contemporary operations is one in which

¹⁰⁴ Martin Coward, *Urbicide: The Politics of Urban Destruction* (Abingdon, Oxon: Routledge, 2009), 15.

¹⁰⁵ A point treated with great perspicacity recently in, John Spencer, “The Destructive Age of Urban Warfare; or, How to Kill a City and How to Protect it,” Modern War Institute, March 28, 2019, <https://mwi.usma.edu/destructive-age-urban-warfare-kill-city-protect/>.

¹⁰⁶ Storr, *The Human Face of War*, 199.

having the technological edge is no longer decisive on its own, if indeed it ever was. Thriving in the urban environment requires that statesmen and commanders settle clearly and wisely on policy aims that military power has a chance of achieving. That is what will enable placing a greater emphasis on tempo and exploiting the greater tactical flexibility and individual lethality of the modern Western soldier in the conduct of operations. These injunctions would, we believe, result in operations more truly in line with the maneuverist approach that is now frequently invoked but is not actively practiced. The city is a harsh and complex place in which to fight. But, like Spencer Chapman's jungle, it is neutral. In the pursuit of sound policies, Western militaries possess the skills and capabilities to master warfare in the city, if only leaders have the courage to let them get on with it.

David Betz is Professor of War in the Modern World in the War Studies Department at King's College London. He is head of the Insurgency Research Group, deputy director of the King's Centre for Strategic Communications, and senior fellow of the Foreign Policy Research Institute (Philadelphia). He has written on information warfare, the future of land forces, the virtual dimension of insurgency, propaganda of the deed, cyberspace and insurgency, and British counter-insurgency in such journals as the *Journal of Strategic Studies*, the *Journal of Contemporary Security Studies*, and *Orbis*. His latest book is *Carnage and Connectivity: Landmarks in the Decline of Conventional Military Power* (Hurst/Oxford University Press). He is now working on a new book entitled *Walled Worlds*, which explores the contemporary resurgence of fortification strategies.

Hugo Stanford-Tuck is a lieutenant colonel in the British Army's Royal Gurkha Rifles, a light infantry regiment specializing in air assault and jungle operations. He has commanded infantry soldiers on operations in Sierra Leone, the Balkans, Iraq, and Afghanistan. Lt. Col. Stanford-Tuck has planned military campaigns at the political-strategic level, disaster relief activities at the operational level, and combat operations at the tactical level. He has written about counter-insurgency, combat, and the entwined Darwinian relationship between adversaries. He is currently studying for an MBA at Warwick Business School and next year will be establishing and then commanding a new battalion of Gurkha Specialized Infantry.